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ABSTRACT

This report presents statistical data on: (1) the ways in which children in the United States are cared for while their parents are at work, looking for work, or at school; (2) the complexity of these arrangements and the accompanying disruptions in the daily work schedule; and (3) payments for child care services. The statistics in this report cover children under the age of 15 whose parents or guardians were in the labor force or attending school during September to December 1988, and are based on data gathered by the Survey of Income and Program Participation (SIPP). The majority of the report consists of 7 figures, 12 text tables, 14 detailed tables, and 6 appendix tables. Four additional appendixes provide information on the SIPP program, definitions and explanations, sources and accuracy of estimates, and data quality. Facsimiles of the SIPP child care module and the SIPP work schedule are also appended. (MDM)

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CURRENT POPULATION REPORTS
**Household Economic Studies**
P70–30

ED 368 460

# Who's Minding The Kids?

## Child Care Arrangements: Fall 1988

SIPP
Survey of Income and Program Participation

by Martin O'Connell
and Amara Bachu

U.S. Department of Commerce
Economics and Statistics Administration
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**Household Economic Studies**
P70–30
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# Who's Minding The Kids?

Child Care Arrangements:
Fall 1988

by Martin O'Connell
and Amara Bachu

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# Who's Minding the Kids? Child Care Arrangements: Fall 1988

## INTRODUCTION

There were 19.7 million women in the labor force in 1988 with children under 15 years of age. The child care statistics shown in this report are for children under the age of 15 whose parents or guardians were in the labor force or attending school during September to December, 1988. How these children were cared for while their parents were at work, looking for work, or in school, the complexity of these arrangements and the accompanying disruptions in the daily work schedule, and payments for child care services are some of the topics presented in this report.

**Survey background.** Data on child care arrangements have been collected by the Census Bureau in prior supplements to the Current Population Survey (CPS) since 1958[1] and in supplements to the Survey of Income and Program Participation (SIPP) since 1984.[2] This report discusses the most recent statistics on child care arrangements in the United States based on data collected in the SIPP for the period September to December, 1988. Data from earlier CPS and SIPP supplements on child care are also presented in order to show a historical perspective on changes that have occurred in the way working parents arrange for the care of their children.

For the first time in this series of reports, we will show estimates of child care costs for individual arrangements and the average number of hours per week each child spends in these arrangements. We will also show the number of arrangements where payments were made separately or shared for brothers and sisters in the same family. In addition, this report shows how frequently parents change child care arrangements and the reasons for these changes. Since many young children now have both parents in the labor force, this report will feature the child care arrangements used by dual-employed parents according to their work shift.

**Terms used in this report.** Children under 15 years of age in this reported are divided into two major categories: preschool-age children (under 5 years of age) and grade school-age children (5 to 14 years of age). The term "child care arrangement" used in this report describes how children are cared for during the time their parents are in the labor force (either working or looking for a job) or attending school. Child care arrangements include not only informal arrangements where neighbors, relatives, or family members look after the children either in the child's home or in their own homes but also organized child care facilities such as day or group care centers and nursery schools or preschools. The reader should be cautioned that these distinctions may not always be clear to the respondent and may even be affected by regional differences in terminology or governmental regulations used to categorize child care arrangements.

The report also includes responses which indicate that the parents themselves were caring for their children while at work (either at home or outside their home), looking for a job or attending school, or that the children were caring for themselves. Since school-age children are included in the survey, child care, in its broadest sense, also includes the time children are enrolled in kindergarten or grade school during the time their parents are in the labor force or in school. For the first time, a new child care arrangement "school-based activity before or after school" has been included. This category consists of school-based supervised activities such as sports, music, and arts and crafts classes that are outside the regular school hours.

Some parents may use more than one type of child care arrangement in a typical week; therefore, two categories of arrangements are shown in this report, primary and secondary. The primary child care arrangement refers to what the child was usually doing or the way the child was usually cared for during most of the hours the child's parent was in the labor force or in school. If other arrangements were used in addition to the primary arrangement, the one used second most frequently was called the secondary arrangement. For example, if a child was in grade school most of the time his or her parent worked and then cared for himself or herself after school, the primary child care arrangement for this child would be "enrolled in grade school" and the secondary child care arrangement would be "child cares for self."

[1]Current Population Reports, Series P-23, No. 117, **Trends in Child Care Arrangements of Working Mothers,** and Series P-23, No. 129, **Child Care Arrangements of Working Mothers: June 1982.**

[2]Current Population Reports, Series P-70, No. 9, **Who's Minding the Kids? Child Care Arrangements: Winter 1984-85;** Series P-70, No. 20, **Who's Minding the Kids? Child Care Arrangements: 1986-87.**

The respondent determined the category of the child care arrangement used for his or her own children. No inquiry was made in the survey concerning the licensing status of the child care facilities or private homes providing the child care.

Information on child care arrangements used by parents for their children was asked of the wife and not the husband in the case of married-couple families. As such, the child care arrangement listed was that used while the wife, not the husband, was in the labor force or in school. In families where only one parent was present or where the child was cared for by a legal guardian (excluding foster parents), information on child care arrangements was obtained from that parent or guardian.

In cases where the designated respondent was both employed and enrolled in school, questions on child care arrangements pertain only to the time the respondent was at work. If the respondent was enrolled in school and also looking for a job, the responses only refer to the time the respondent was in school. The terms "employed" or "working" mothers or women are used interchangeably in this report to refer to women employed in the paid labor force in the month preceding the interview.

The definitions for day and non-day work shift used in this report are based on Bureau of Labor Statistics guidelines.[3] Day shift is defined as a work schedule where at least one-half of the hours worked fall between 8:00 a.m. and 4:00 p.m. and where the respondent described the schedule as being a regular daytime schedule. All other work schedules having the majority of the hours worked being outside the 8:00 a.m. and 4:00 p.m. core period are classified as non-day work shifts, including respondents who reported that they worked rotating or irregular hours, regardless of their time schedules of employment.

## HIGHLIGHTS

(The figures in parentheses denote the 90-percent confidence interval of the estimate.)

The principal findings of the survey are summarized below:

### Child care arrangements and trends

- There were 53.4 (±0.2) million children under age 15 living with their parents in fall 1988. About 57 (±0.7) percent of these children, 30.3 (±0.4) million, had mothers who were employed; of these children 9.5 (±0.3) million were under 5 years old and 20.8 (±0.4) million were 5 to 14 years old.
- Among preschool-age children of employed mothers 26 (±1.6) percent were using organized child care facilities most of the time their mothers were at work, up from 23 (±1.8) percent in winter 1984-85 when the first SIPP survey was conducted. From a longer perspective, both the 1988 and 1984-85 proportions were significantly higher than the 13 (±1.4) percent recorded for preschoolers in 1977.
- Although almost one-half (43 ±3.8 percent) of 5-year old children were in school most of the time their mothers were at work, about one in five children (19 ±3.0 percent) used organized child care facilities. Among children 6 to 14 years of age, 79 (±1.0) percent were in school while their mothers were at work.

### Child care arrangements of grade school children

- About 15.7 (±0.4) million of the total 20.8 (±0.4) million gradeschool age children of employed mothers spent most of their time in school while their mothers were working. Including secondary arrangements after school, about 1.4 (±0.1) million were reported to have cared for themselves while their mothers were at work.
- The average number of hours worked by mothers with grade schoolage children was 34.7 (±0.4) hours per week. These children spent only 26.3 (±0.4) hours in child care arrangements including an average of 18.7 (±0.4) hours per week in school. The difference between the mother's hours at work and the time the child spent in child care arrangements could be accounted for, at least partially, by travel time between school, care arrangements, and home.

### Time lost from work and changes in arrangements

- Of the 19 (±0.4) million employed women with children under 15 years, 4.4 (±0.5) percent lost time from work in the month before the survey as a result of a failure in child care arrangements.
- Work disruptions from failures in child care arrangements affected 6 (±2.1) percent of employed women with infants. Lost time from work was least reported among women whose youngest child was 12 to 14 years old (1.3 ±0.7 percent).
- In the case of married couples with children, 3.7 (±0.5) percent said the wife alone lost time from work while 0.7 (±0.2) percent said only the husband lost time from work (a similar percentage, 0.6 (±0.2) percent, said both lost time from work).
- About 16 (±0.9) percent of employed mothers reported that they had changed child care arrangements in the four months prior to the interview. Only 8 (±1.7)

[3] See J.N. Hedges and E.S. Sekscenski, "Workers on Late Shifts in a Changing Economy," **Monthly Labor Review**, Vol. 102, No. 9, (September 1979), pp. 14-22.

percent of women whose youngest child was 12 to 14 years old changed arrangements compared to 17 (±3.3) percent for women with infants.

- Among women with infants, reliability and quality of care of the provider was mentioned as the principal reason for change in 18 (±8.3) percent of the cases compared to 6 (±5.1) percent for women with children 12 to 14 years of age.

### Family expenditures on child care

- Of the 19 (±0.4) million employed women with children under 15 years of age, 40 (±1.2) percent reported that they made a monetary payment for child care services.

- An estimated $21 billion was spent on child care in 1988. Families paying for child care spent an average of $54 (±$1.9) per week in 1988 compared to $40 (±$1.8) per week in 1984-85; $5.50 (±$2.7) of this increase was due to inflation. These payments in 1988 represented 7 (±0.3) percent of their total family income each month. Women in poverty paid a higher proportion of their monthly family income on child care, 21 (±3.4) percent, compared to women living in families that were not living in poverty, 7 (±0.3) percent.

### Costs of individual child care arrangements

- Of the 6.7 (±0.3) million children for whom separate child care payments were made, 5 (±0.2) million of those children were in child care for 10 or more hours of week. Among families making child care payments, those using 10 or more hours of child care per week for each child made lower hourly payments ($1.78 ±$0.08) than those using less than 10 hours per week ($6.06 ±$0.62).

- The costs for organized child care facilities used for 10 or more hours a week amounted to $1.91 (±$0.14) per hour for each child. When child care was provided by nonrelatives who came into the child's home, the cost per child per hour was $2.61 (±$0.62), about $1.00 more per hour than when the child was brought to the provider's home ($1.63 ±$0.10).

### Costs of shared child care arrangements

- When two or more children in a family shared the same child care provider for 10 or more hours per week, the cost of child care was $1.70 (±0.16) per hour per child, not different from the amount when payments were made separately for each child ($1.78 ±$0.08 per hour).

- When payments were shared by more than one child in the family, care by relatives cost $0.99 (±$0.21) per hour per child compared to $1.38 (±$0.14) when payments were made separately for each child in the family. No "discounts" for child care sharing by the same provider were noted when either nonrelatives or organized child care facilities were used.

## POPULATION COVERAGE

The child care data presented in this report profile the arrangements typically used for children under 15 years old, (including any adopted or step children) during the time their parents were in the labor force or in school. There were an estimated 53.4 million children under age 15 living in the United States in the fall (September to December) of 1988 (table A). About 57 percent of these

Table A. **Population Universe for Child Care Module: Fall 1988**

(In thousands. Numbers represent the average monthly estimate of children or their parents/guardians who are either in the labor force or enrolled in school)

| Population | All children | Children under 5 years | Children 5 to 14 years |
|---|---|---|---|
| **PARENTS IN THE LABOR FORCE OR IN SCHOOL[1]** | | | |
| Total | 21,226 | 9,097 | 15,943 |
| Number of mothers | 20,465 | 8,864 | 15,350 |
| Number of fathers | 761 | 233 | 593 |
| **CHILDREN** | | | |
| Total number[2] | 53,448 | 18,625 | 34,822 |
| Children of parents in the labor force or in school[3] | 33,790 | 10,674 | 23,117 |
| Child living with mother | 32,888 | 10,436 | 22,452 |
| Mother employed: | | | |
| Number of mothers | 18,902 | 8,105 | 14,303 |
| Number of children | 30,287 | 9,483 | 20,804 |
| Mother unemployed: | | | |
| Number of mothers | 750 | 330 | 551 |
| Number of children | 1,340 | 456 | 884 |
| Mother enrolled in school: | | | |
| Number of mothers | 813 | 429 | 496 |
| Number of children | 1,261 | 497 | 764 |
| Child living with father[4] | 902 | 237 | 665 |
| Number of fathers | 761 | 233 | 593 |
| Number of children | 902 | 237 | 665 |
| Children of parents not in the labor force or in school[5] | 19,659 | 7,951 | 11,705 |

[1]Person in household who is the parent or guardian of the child(ren). In the case of married couple families, the wife is designated as the reference person for the child care module. The total numbers of parents is less than the sum of the two age groups as some parents have children in both age groups.

[2]Total estimated number of children regardless of parent's labor force or school enrollment status.

[3]Information collected for only the three youngest children in the household.

[4]Father either in the labor force or enrolled in school.

[5]Consists of children living with their mothers who are not in the labor force or enrolled in school and children living only with fathers or male guardians who are not in labor force or enrolled in school.

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children (30.3 million) had mothers who were employed. There were another 1.3 million children whose mothers were unemployed (looking for work) and a similar number of children whose mothers were enrolled in school.

Table A also shows the numbers of children who were living only with their fathers or male guardians who were either in the labor force or enrolled in school. An estimated 761,000 men cared for 902,000 children under 15 years old. However, data from the 1986 and 1987 SIPP surveys indicated that 1.5 million and 1.9 million children, respectively, were living only with their fathers.[4] Estimates from the March 1988 Current Population Survey indicate that there were 1.4 million children under 15 years old living only with their father, an estimate not different from the 1986 SIPP estimate of 1.5 million.[5] The sharp decline in the estimated number of children cared for by their fathers in the SIPP surveys between 1987 and 1988 and the lower numbers of children in the 1988 SIPP panel compared to the March 1988 CPS suggest that the 1988 SIPP estimates may not be accurate reflections of the living arrangements of these children.

The remaining number of children under 15 years of age, 19.7 million (table A), consists of those living with their mothers who were not in the labor force or enrolled in school and those children living only with their fathers or male guardians who were not in the labor force or enrolled in school.

[4]Current Population Reports, Series P-70, No. 20, **op.cit.**
[5]Current Population Reports, Series P-20, No. 433, **Marital Status and Living Arrangements: March 1988,** table 4.

## PRIMARY CHILD CARE ARRANGEMENTS FOR PRESCHOOLERS

The choice of child care arrangements for preschool-age children is one of the most important daily decisions parents make. It is an age when children are most dependent on a care provider's supervisory skills and often marks the time when children make their first prolonged social contacts with persons outside the immediate family.

Table B shows the distribution of the primary child care arrangements used by employed mothers for children under 5 years old (preschoolers) in fall 1988. Twenty-eight percent of these preschoolers in fall 1988 were cared for in their own homes, mainly by their fathers, while 37 percent were cared for in another home, usually by someone not related to the child. A similar proportion of children used organized child care facilities (26 percent) as were cared for in their own home; these facilities provided the primary child care services for 2.5 million children under 5 years old. An additional 8 percent (723,000) of preschoolers were cared for by their mothers while working, either at home or away from home. The majority of these children (502,000) were cared for by their mothers who worked at home, thus eliminating potentially expensive commuting and child care costs.

The hourly demands for child care services placed upon families with mothers employed full time cannot normally be met by other household members or relatives who have full-time jobs and career commitments. As a result, the location of child care activities for full-time working mothers tends to be outside of the

**Table B. Primary Child Care Arrangements Used by Employed Mothers for Children Under 5 Years, by Age of Child: Fall 1988**

(Numbers in thousands)

| Type of arrangement | All children | | Less than 1 year | | 1 and 2 years | | 3 and 4 years | |
|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Total | 9,483 | 100.0 | 1,523 | 100.0 | 3,925 | 100.0 | 4,035 | 100.0 |
| Care in child's home | 2,678 | 28.2 | 475 | 31.2 | 1,231 | 31.4 | 971 | 24.1 |
| By father | 1,433 | 15.1 | 249 | 16.4 | 596 | 15.2 | 587 | 14.6 |
| By grandparent | 539 | 5.7 | 108 | 7.1 | 290 | 7.4 | 141 | 3.5 |
| By other relative | 207 | 2.2 | 36 | 2.3 | 93 | 2.4 | 78 | 1.9 |
| By nonrelative | 500 | 5.3 | 82 | 5.4 | 253 | 6.4 | 164 | 4.1 |
| Care in another home | 3,491 | 36.8 | 621 | 40.8 | 1,621 | 41.3 | 1,249 | 30.9 |
| By grandparent | 778 | 8.2 | 160 | 10.5 | 363 | 9.2 | 255 | 6.3 |
| By other relative | 476 | 5.0 | 69 | 4.5 | 230 | 5.8 | 178 | 4.4 |
| By nonrelative | 2,237 | 23.6 | 392 | 25.7 | 1,029 | 26.2 | 816 | 20.2 |
| Organized child care facilities | 2,451 | 25.8 | 278 | 18.2 | 791 | 20.2 | 1,382 | 34.2 |
| Day/group care center | 1,575 | 16.6 | 246 | 16.2 | 595 | 15.2 | 734 | 18.2 |
| Nursery/preschool | 875 | 9.2 | 32 | 2.1 | 196 | 5.0 | 648 | 16.1 |
| School-based activity | 15 | 0.2 | - | - | 8 | 0.2 | 7 | 0.2 |
| Kindergarten/grade school | 121 | 1.3 | - | - | - | - | 121 | 3.0 |
| Child cares for self | 5 | 0.1 | 5 | 0.4 | - | - | - | - |
| Mother cares for child at work[1] | 723 | 7.6 | 144 | 9.4 | 273 | 7.0 | 306 | 7.6 |

- Represents zero.
[1]Includes women working at home or away from home.

child's home with nonrelatives, rather than in the child's home with family members or relatives.

Table 1 shows that preschool-age children of mothers employed full time were less likely to be cared for at home (21 percent) than were children of mothers employed part time (41 percent). Offsetting this difference, full-time working mothers relied more heavily than part-time workers on child care in someone else's home and on organized child care facilities.

Children of part-time workers were more likely to be cared for by their mothers while at work (12 percent), than were children of mothers who worked full time (5 percent). In addition, child care provided by the father was also more frequent when women worked part time (27 percent) than full time (8 percent). More part-time working mothers with preschoolers worked non-day schedules (63 percent) than did full-time working mothers (25 percent), thus enabling fathers who worked on a "9 to 5" schedule the opportunity to look after their children (table 10).

**Variations in arrangements by age of the child.** As children grow from infancy to school age, employed women make considerable changes in child care arrangements in order to meet the needs of their children and the changing demands of their family and their employer. However, one of the problems that families face in finding child care arrangements for young children may be due to minimum age requirements for children admitted to organized child care facilities. Estimates from the June 1988 Current Population Survey (CPS) show that 51 percent of all women 18 to 44 years old who had a birth in the 12-month period preceding the survey were in the labor force, up from 31 percent in 1976.[6]

Data for fall 1988 indicate that there were 1.5 million children under 1 year of age whose mothers were employed in the labor force (table B). Seventy-two percent of these infants were cared for in either the child's home or another home. Another 16 percent were cared for in day/group care centers while 2 percent were cared for in nursery/preschools.

Among 1- and 2-year olds, child care either in the child's home or in another home accounted for 73 percent of all arrangements while organized child care facilities made up 20 percent of the primary care for these children, neither of these percentages being statistically different from that recorded for infants' arrangements. For 3-and 4-year old children, care in either the child's home or in another home declined to 55 percent of all arrangements while organized child care facilities made up 34 percent of the primary care. For these older children, the proportion enrolled in nursery schools was not statistically different from those in day/group care centers while among younger children the large majority who were in organized child care facilities were in day care centers.

Data in table B show that 0.1 percent of children under 5 (estimated to be 5,000 children) cared for themselves while their mothers were at work in 1988. The reader should be warned that this represents the response for one woman in the survey. Given the sample size of this survey and the possible nonsampling errors that may exist, one should not consider this isolated response as evidence of any trend or accurate representation of the number of preschool-age children left unsupervised while their mothers were at work.

**Trends in child care arrangements: 1977 to 1988.** Table C shows the distributions of the primary child care arrangements used by employed mothers for their children under 5 years old for selected survey years between 1977 and 1988. Since 1977, there has been a decline in the utilization of relatives, but not the child's father, as child care providers both in the child's home and in the provider's home. For example, care provided by relatives (excluding fathers) in the child's home declined from 12.6 percent in 1977 to 7.9 percent in 1988. Similarly, care provided by relatives in their own homes also decreased between 1977 and 1988 from 18.3 to 13.2 percent (table C).

The decline in the use of relatives as child care providers may reflect the overall increase in the labor force participation of women outside the home, thus reducing the potential number of female relatives available for child care services. The proportion of children cared for by their mothers while at work also declined between 1977 and 1988 from 11.4 to 7.6 percent.

In contrast to declines in the frequency of care provided by relatives and by the child's mother, increases were noted in the proportion of children cared for in organized child care facilities (day/group care centers or nursery/preschools). In fall 1988, 26 percent of children under age 5 were in organized child care facilities most of the time their mothers were at work, only slightly higher than the 23 percent recorded in the first SIPP survey taken in 1984-85. However, earlier estimates from the June 1977 CPS indicated that only 13 percent of preschoolers were in organized child care facilities while their mothers were at work.

## CHILD CARE ARRANGEMENTS FOR GRADE-SCHOOL CHILDREN

**Primary arrangements.** Most grade-school age children were in school while their mothers were at work (76 percent, table D). This does not mean that the remaining 24 percent were not enrolled in school; rather it

[6]Data from the June 1990 CPS (Current Population Reports, Series P-20, No. 454, **Fertility of American Women: June 1990**, table C) indicate a continuing increase in the proportion of women with infants in the labor force since 1976, reaching 53 percent in 1990.

## Table C. Primary Child Care Arrangements Used by Employed Mothers for Children Under 5 Years: Selected Periods, 1977 to 1988

(Numbers in thousands)

| Type of arrangement | Fall 1988 | Fall 1987 | Fall 1986 | Winter 1984-85 | June 1977[1] |
|---|---|---|---|---|---|
| Number of children | 9,483 | 9,124 | 8,849 | 8,168 | 4,370 |
| Percent | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Care in child's home | 28.2 | 29.9 | 28.7 | 31.0 | 33.9 |
| By father | 15.1 | 15.3 | 14.5 | 15.7 | 14.4 |
| By grandparent | 5.7 | 5.1 | 5.2 | 5.7 | NA |
| By other relative | 2.2 | 3.3 | 3.4 | 3.7 | [4]12.6 |
| By nonrelative | 5.3 | 6.2 | 5.5 | 5.9 | 7.0 |
| Care in another home | 36.8 | 35.6 | 40.7 | 37.0 | 40.7 |
| By grandparent | 8.2 | 6.7 | 10.2 | 10.2 | NA |
| By relative | 5.0 | 4.6 | 6.5 | 4.5 | 18.3 |
| By nonrelative | 23.6 | 22.3 | 24.0 | 22.3 | 22.4 |
| Organized child care facilities | 25.8 | 24.4 | 22.4 | 23.1 | 13.0 |
| Day/group care center | 16.6 | 16.1 | 14.9 | 14.0 | NA |
| Nursery school/preschool | 9.2 | 8.3 | 7.5 | 9.1 | NA |
| School-based activity | 0.2 | NA | NA | NA | NA |
| Child cares for self | 0.1 | 0.3 | - | - | 0.4 |
| Mother cares for child at work[2] | 7.6 | 8.9 | 7.4 | 8.1 | 11.4 |
| Other arrangements[3] | 1.3 | 1.0 | 0.8 | 0.8 | 0.6 |

NA Not available. - Represents zero.

Source: Tabulations derived from the June 1977 Current Population Survey; Current Population Reports, Series P-70, No. 9, table 1; Series P-70, No. 20, table 1, Part A and Part B; and table 1 of this report.

[1]Data only for the two youngest children under 5 years of age.
[2]Includes mothers working at home or away from home.
[3]Inicudes children in kindergarten/grade school.
[4]Data for 1977 includes grandparents.

## Table D. Primary Child Care Arrangements Used by Employed Mothers for Children Under 15 Years: Fall 1988

(Numbers in thousands)

| Type of arrangement | All children | | Children under 5 years | | Children 5 to 14 years | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| Total | 30,287 | 100.0 | 9,483 | 100.0 | 20,804 | 100.0 |
| Care in child's home | 5,158 | 17.0 | 2,678 | 28.2 | 2,480 | 11.9 |
| By father | 2,906 | 9.6 | 1,433 | 15.1 | 1,473 | 7.1 |
| By grandparent | 770 | 2.5 | 539 | 5.7 | 232 | 1.1 |
| By other relative | 671 | 2.2 | 207 | 2.2 | 464 | 2.2 |
| By nonrelative | 811 | 2.7 | 500 | 5.3 | 311 | 1.5 |
| Care in another home | 4,323 | 14.3 | 3,491 | 36.8 | 833 | 4.0 |
| By grandparent | 1,060 | 3.5 | 778 | 8.2 | 282 | 1.4 |
| By other relative | 623 | 2.1 | 476 | 5.0 | 147 | 0.7 |
| By nonrelative | 2,640 | 8.7 | 2,237 | 23.6 | 403 | 1.9 |
| Organized child care facilities | 2,977 | 9.8 | 2,451 | 25.8 | 526 | 2.5 |
| Day/group care center | 1,931 | 6.4 | 1,575 | 16.6 | 356 | 1.7 |
| Nursery/preschool | 1,045 | 3.5 | 875 | 9.2 | 170 | 0.8 |
| School-based activity | 361 | 1.2 | 15 | 0.2 | 346 | 1.7 |
| Kindergarten/grade school | 15,832 | 52.3 | 121 | 1.3 | 15,711 | 75.5 |
| Child cares for self | 481 | 1.6 | 5 | 0.1 | 476 | 2.3 |
| Mother cares for child at work[1] | 1,155 | 3.8 | 723 | 7.6 | 433 | 2.1 |

[1]Includes women working at home or away from home.

implies that the majority of the hours that these mothers worked did not necessarily coincide with the hours of the day the children are in school.

Of the remaining 5.1 million grade-school-age children not in kindergarten/grade school while their mothers worked, 2.5 million children were cared for in their own home. Over one-half of the total care given in the children's homes was provided by the children's fathers. About 476,000 children were left unsupervised most of the time that their mothers were at work; another 346,000 children were involved in a school-based activity.

**Variations in arrangements by age of the child.** Just as the type of child care arrangements change as the child ages from infancy to preschool age, child care arrangements for grade-school age children shift dramatically after age 5 (table 3, upper panel). Among 5 year olds who were just entering kindergarten and grade school, 43 percent were in school most of the time their mothers were at work. Among older children (6 to 14 years old) about 80 percent were in school during the time their mothers were at work.

In contrast, the percentage of children cared for primarily in either their own home or in another home sharply declined after age 5. Among 5 year olds, 31 percent were cared for in a home environment compared to 16 percent among 6-to-11 year olds. Use of organized child care facilities also rapidly diminished from 19 percent for 5 year olds to about 1 percent among 6-to-11 year olds. After age 5, when virtually all children are enrolled in school, self-care by children noticeably increased from 1 to 6 percent between younger and older grade school-age children.

**After school arrangements.** The first panel of data in table 3 shows that approximately three-quarters (15.7 million) of gradeschool-age children were in school most of the time while their mothers were at work. From earlier test surveys of this module conducted in Boston in 1983, interviewers reported that respondents frequently did not consider school attendance as a form of child care arrangement, even though many women were at work while their children were in school. The question arises, What would be the distribution of child care arrangements if school attendance was eliminated from the table?

The second panel of data in table 3 re-distributes the child care arrangements in the first panel by excluding responses of kindergarten/grade school attendance and substituting the secondary arrangements used, if any, by these 15.7 million children while their mothers were at work. For example, after the addition of these secondary arrangements, the resulting number of children cared for at home was 5,033,000 (second panel, table 3) compared to the original estimate of 2,480,000 (first panel, table 3). The number of children 5 to 14 years of age who were reported to have cared for themselves while their mothers were working also increased from 476,000 to 1.4 million, reflecting the addition of 926,000 children using this secondary arrangement (table 4).

The second panel in table 3 also reveals that 8.8 million children were reported not to have any additional child care arrangements after school, i.e., no secondary child care arrangements were made (second panel, table 3). Does this mean all of these children cared for themselves after school? The second panel of data in table 3 attempts to answer this question by examining whether the mother's work hours are likely to occur during the time child was in school.

Of the 8.8 million children with no reported secondary child care arrangements after school, 3.1 million were in school at least the same number of hours per week that their mothers reported working. It is likely that the mothers of these children worked during their children's school hours and came home to care for them after work, thereby obviating the need for a secondary arrangement.

For the remaining 5.7 million children with no reported secondary arrangements, the hours per week their mothers worked exceeded the number of hours per week the children were in school. Potentially, this means that another 5.7 million children were without care arrangements after school in addition to the 1.4 million children who were reported by their mothers to be in self care after school. It may be that some mothers do not consider the response "child cares for self" as a true arrangement and hence may say that no secondary arrangement is used. Other respondents may perceive that leaving a child unattended may be interpreted as an undesirable response. In any case we do not know the degree or lack of supervision of these self-care arrangements.

Table E and figure 1 provide a further look at the above issue. The data in this table show the average number of hours per week spent by the mothers while at work (34.4 hours) and the average number of hours the children spent each week in child care arrangements (27.5 hours), including primary and secondary arrangements. Figure 1 shows only a slight increase in the number of hours mothers worked per week with increases in the child's age. The average number of hours worked by mothers with children under 5 years was 33.6 per week compared to 34.7 per week for mothers with children 5 to 14 years old.

With increasing age, however, children spend fewer hours per week in child care arrangements, even including the time they were in school. Children under 5 years spend an average of 30 hours per week in child care arrangements compared to only 26 hours per week for grade-school-age children. What can account for (1) the apparent shortfall in child care hours compared to the

**Table E. Average Weekly Hours of Child Care Used by Employed Mothers: Fall 1988**

(Numbers in thousands)

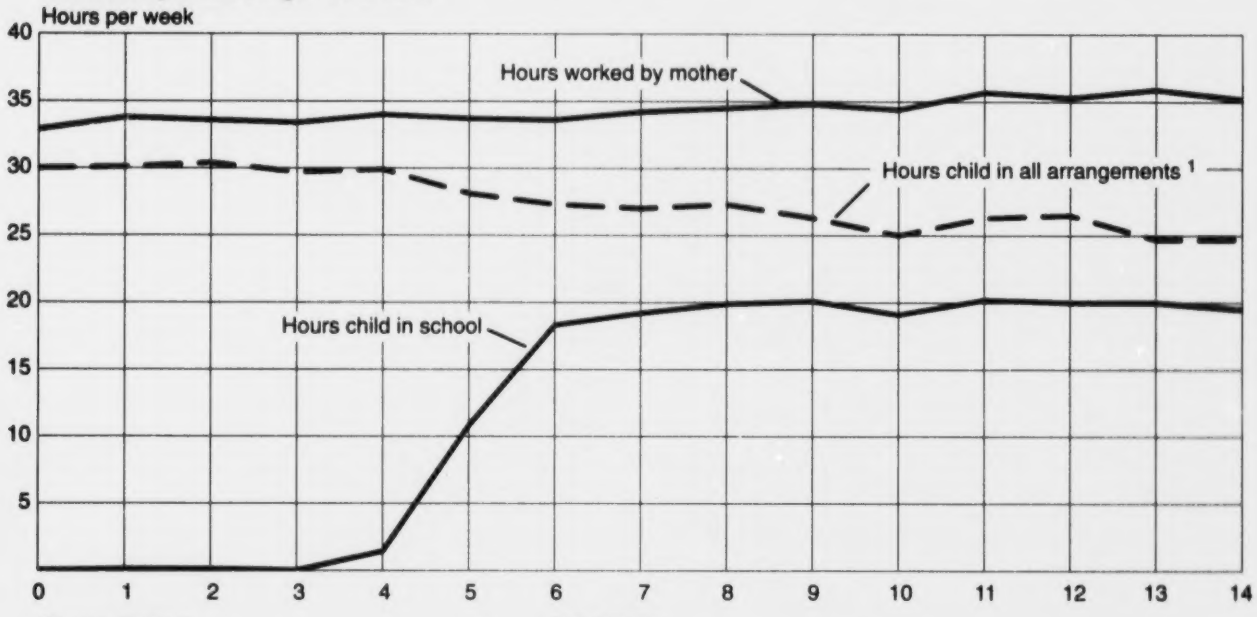
| Age of child | Number of children | Hours per week spent by mother at work | Hours per week spent by children in a child care arrangement | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Total | Type of arrangement | | Location of arrangement | | |
| | | | | Primary arrangement | Secondary arrangement | Child in school[1] | Child in non-school arrangement | Child cares for self |
| Total | 30,287 | 34.4 | 27.5 | 24.4 | 3.1 | 12.9 | 14.1 | 0.5 |
| Under 5 years | 9,483 | 33.6 | 30.0 | 28.1 | 1.9 | 0.3 | 29.7 | - |
| Less than 1 year | 1,523 | 32.9 | 30.0 | 28.8 | 1.2 | - | 29.9 | 0.1 |
| 1 year | 1,979 | 33.8 | 30.1 | 28.5 | 1.6 | 0.1 | 30.0 | - |
| 2 years | 1,945 | 33.6 | 30.4 | 28.8 | 1.6 | 0.1 | 30.3 | - |
| 3 years | 2,022 | 33.4 | 29.7 | 27.4 | 2.3 | - | 29.7 | - |
| 4 years | 2,014 | 34.0 | 29.9 | 27.0 | 2.9 | 1.4 | 28.5 | - |
| 5 to 14 years | 20,804 | 34.7 | 26.3 | 22.7 | 3.6 | 18.7 | 7.0 | 0.7 |
| 5 years | 2,144 | 33.7 | 28.1 | 22.3 | 5.8 | 10.8 | 17.3 | - |
| 6 years | 2,050 | 33.6 | 27.3 | 22.3 | 5.0 | 18.3 | 8.9 | 0.1 |
| 7 years | 2,128 | 34.2 | 27.0 | 22.3 | 4.7 | 19.2 | 7.7 | 0.1 |
| 8 years | 2,024 | 34.5 | 27.3 | 23.1 | 4.1 | 19.9 | 7.3 | 0.1 |
| 9 years | 2,160 | 34.8 | 26.3 | 22.7 | 3.6 | 20.1 | 6.0 | 0.3 |
| 10 years | 2,037 | 34.4 | 25.0 | 21.9 | 3.1 | 19.1 | 5.3 | 0.6 |
| 11 years | 2,148 | 35.7 | 26.3 | 23.5 | 2.8 | 20.2 | 5.2 | 1.0 |
| 12 years | 2,003 | 35.3 | 26.5 | 23.8 | 2.7 | 20.0 | 5.0 | 1.5 |
| 13 years | 2,063 | 35.9 | 24.7 | 22.4 | 2.3 | 20.0 | 3.6 | 1.1 |
| 14 years | 2,045 | 35.2 | 24.7 | 22.9 | 1.8 | 19.5 | 3.2 | 2.0 |

Note: See table 12 for the standard errors of the means.

- Represents zero.

[1]Children in kindergarten/grade school or in school based activity.

Figure 1.
**Average Weekly Hours of Child Care Used by Employed Mothers by Child's Age: Fall 1988**




Source: Table E.

[1] Includes hours in school.

mother's working hours and (2) why does this discrepancy increase with the child's age as shown in figure 1?

The 3-4 hour difference between the mother's working hours and the child's arrangement hours for preschoolers noted in table E may be partly explained by rounding the daily estimates of work and child care hours reported by mothers to produce the weekly totals. In addition, time associated with transportation of the child between home and child care providers may have been unaccounted for in the estimates of the number of hours per week used for child care arrangements.

The difference between estimates of weekly work and child care arrangements increases sharply from about 6 hours per week for 5 year olds to about 11 hours per week for children 14 years old. Again, these discrepancies do not necessarily mean that the child is alone all these hours as some of this time may constitute travel time to school with other children or in the presence of other adults. For these older grade-school-age children who may travel longer distances to go to school, travel time from home to school to a secondary arrangement and back home again can easily take more than an hour per day which would translate into at least 5 hours per week. Some mothers may include these transportation time gaps as secondary arrangements where the "child cares for self." Others, however, may ignore these time periods, hence the resulting hourly differences which are noted in table E and figure 1.

## ORGANIZED CHILD CARE FACILITIES

The term organized child care facilities used in this report refers to day/group care centers and nursery/preschools. A day/group care center must be an incorporated business and licensed to care for children and may be run by a government agency, a business enterprise, or a religious or a free-standing charitable organization. A day care center may be located in a private home. If a person is licensed to care for children in his or her own home but does not claim to be a business enterprise or day care center, this arrangement is categorized as care provided by a "nonrelative in another home." Often, this provider is called a "family day-care provider."

Nursery schools or preschools are used to describe formal organizations which provide an educational experience for children before they are old enough to enter kindergarten or grade school. These organizations include instruction as an important and integral phase of their program of child care. Head Start programs are included in this category.

**Characteristics of users of organized child care.** In fall 1988, 17 percent (1,575,000) of children under 5 years old of employed women were in day/group care centers while another 9 percent (875,000) were enrolled in nursery/preschool programs (table B). The majority (56 percent) of preschoolers using organized child care facilities were 3 and 4 years old; 11 percent were under 1 year of age and 32 percent were either 1 or 2 years old.

Table 2 shows that the use of organized child care arrangements was higher among women employed full time (31 percent) than among women employed part time (17 percent). Twenty-seven percent of the primary child care arrangements for the children of part-time working women were provided by the children's fathers, compared to only 8 percent for mothers employed full time, which partly accounts for their low usage of organized child care facilities.

The economic status of the family is also related to the use of organized child care facilities as the primary child care arrangement. Figure 2 shows that children of employed mothers whose family income exceeded $4,500 per month (over $54,000 per year) were more likely to be using organized child care facilities (31 percent) than were children living in families (20 percent) with monthly incomes less than $1,500 per month (less than $18,000 per year).

Also shown in figure 2 is the utilization of organized child care facilities by the poverty level of the children's families. For children living in families below the poverty level, approximately 21 percent used organized child care facilities as the primary child care arrangement while their mothers were at work. (Families with employed mothers with children under 15 years of age living in poverty reported an average family income of $880 per month in 1988). For children living in families categorized as being above the poverty level, 26 percent of the children used organized child care facilities.

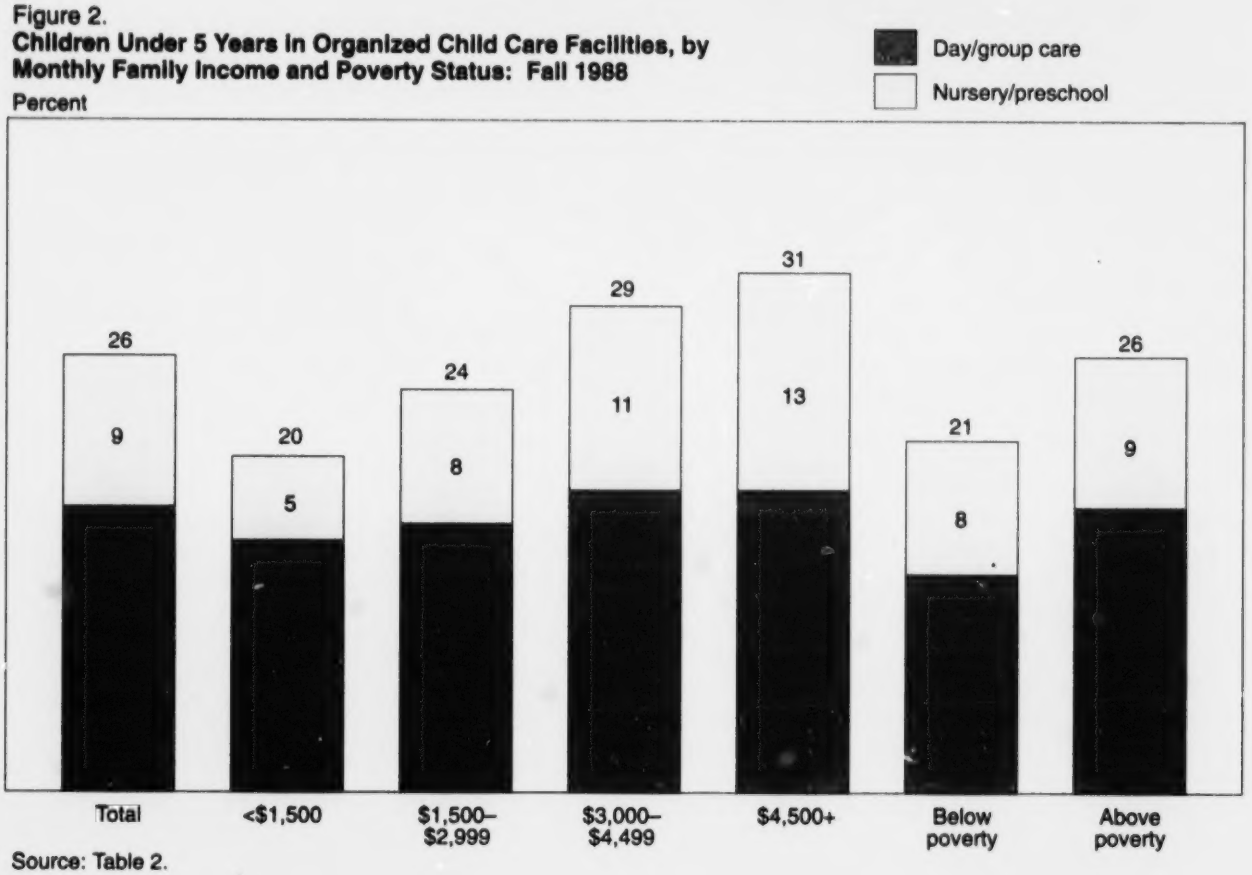
What are the other differences in the types of arrangements used by families in different economic groups (table 2)? Children living in poverty in fall 1988 depended more on care given in their own home, provided by grandparents and other relatives (16 percent), than did children who were not poor (7 percent). On the other hand, children living in families that were not poor relied more on care by family day-care providers than did children living in poverty.

Large differences in the use of organized child care facilities are also noted by the educational attainment level of the mother (table 2). Children whose mothers had completed 4 or more years of college used organized child care facilities twice as often (34 percent) as did children whose mothers failed to complete high school (17 percent). It should be noted that these variations in child are arrangements may reflect the financial abilities of the families in different educational categories.

## CHILD CARE ARRANGEMENTS BY PARENTS' WORK SCHEDULES

**Overview.** Of the 30.3 million children under 15 years of age of employed women, 19 million (63 percent) had mothers who worked a day shift at their principal job

Figure 2.
**Children Under 5 Years in Organized Child Care Facilities, by Monthly Family Income and Poverty Status: Fall 1988**




Source: Table 2.

(table 10). In instances where the mother had two or more jobs, shift-work status was shown in this report only for the principal job (8.3 percent of employed mothers with children under 15 years old held two or more jobs). Categories of shift work in this report were derived from questions in the survey concerning the time of day work usually began and ended and the regularity of the stated time schedule (appendix F, items 1e, 1f, and 1g).[7]

Day shift is defined in this report as a work schedule where at least one-half of the hours worked by the respondent fell between 8:00 a.m. and 4:00 p.m. on a regular daytime basis. All other work schedules outside the 8:00 a.m. to 4:00 p.m. core period, including all evening/night, irregular, rotating, or split day/night shifts, were classified as non-day work shifts (table 14). This definition resulted in 12 million respondents being classified as being regular daytime workers. In addition, table 14 shows that there were an another 1.9 million women who worked at least half of their hours in the 8:00 a.m. to 4:00 p.m. period, but described their schedule as not being a regular daytime shift. These women, and their children, were not included in the day shift categories shown elsewhere in this report. An unknown proportion of these women may comprise women working flex-time schedules which primarily occur during the day but which have no regularly scheduled hours.

Regardless of the child's age, no difference was found in the proportion of children whose mothers worked day or non-day shifts: about 63 percent worked day shifts while 37 percent worked non-day shifts. However, large differences were noted in the work schedules of mothers by their full-time/part-time employment status. Seventy-five percent of children whose mothers were employed full time worked a day shift at their principal job compared to only 39 percent for mothers who were employed part time (table 10). What are some of the reasons women give for choosing their particular type of work shift?

[7] Differences in the estimates of the number of workers in day/non-day shifts derived from the SIPP shown in this report compared to other analyses based on the May 1985 Current Population Survey result from: (1) reference period of the survey; (2) the time frame to which the term "usual" hours worked refers to; and (3) the wording of the questionnaires (H.B. Presser, "Can We Make Time for Children? The Economy, Work Schedules, and Child Care," **Demography**, Vol. 26, No. 4 (November 1989), pp. 523-543).

**Reasons for choosing shift work.** Overall 67 percent of women answered that job requirements determined the type of shift they worked (table F). Another 15 percent mentioned that the main reason for choosing the shift they worked in was to secure better child care arrangements for their children, while 6 percent said that seeking better arrangements for the care of other members of their family was their most important reason for choosing that work shift.

Only one-half of women working part time said that their job requirements determined their work shift compared to three-quarters of women working full time. However, child care issues played a more important role in choosing the type of shift among part-time workers. Twenty-four percent of women working part time cited the need for better child care arrangements as the main reason for choosing the type of work shift compared to 11 percent of women working full time.

The need for better child care arrangements was more important in choosing the type of work shift among women with preschool-age children (19 percent) than among women with grade-school-age children (13 percent). Women with preschoolers who worked part time in a non-day shift were particularly concerned with the need for better child care arrangements, as 31 percent cited this as their main reason for choosing the particular type of shift.

The data indicate that child care arrangements during non-day hours were needed by approximately 6.9 million employed women with children under 15 years old in fall 1988. About 1.4 million of them stated that the need for better child care arrangements was the primary reason for choosing this type of work schedule. This analysis suggests that child care issues play a significant role in the choice of daily work schedules of women.

Table F. **Main Reason Given by Employed Mothers With Children Under 15 Years for Chosing Type of Work Shift of Principal Job: Fall 1988**

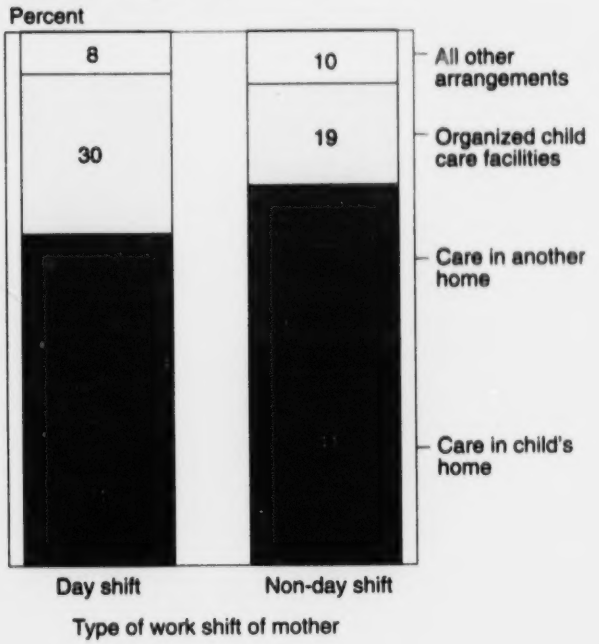
(Percent distribution. Numbers in thousands)

| Employment status, type of shift, and age of youngest child | Number | Reasons for choosing work shift | | | | |
|---|---|---|---|---|---|---|
| | | Total | Required by job | Child care arrangements | Other family care arrangements | All other reasons |
| Total | 18,902 | 100.0 | 66.8 | 15.2 | 5.5 | 12.5 |
| Employed full time | 12,697 | 100.0 | 74.9 | 11.2 | 3.7 | 10.2 |
| Day shift | 9,568 | 100.0 | 77.8 | 9.8 | 3.5 | 8.9 |
| Not a day shift | 3,129 | 100.0 | 66.0 | 15.4 | 4.1 | 14.5 |
| Employed part time | 6,204 | 100.0 | 50.3 | 23.6 | 9.4 | 16.7 |
| Day shift | 2,441 | 100.0 | 54.2 | 21.6 | 8.8 | 15.4 |
| Not a day shift | 3,763 | 100.0 | 47.8 | 24.8 | 9.7 | 17.7 |
| Under 5 Years | 8,103 | 100.0 | 64.6 | 18.5 | 5.0 | 11.9 |
| Employed full time | 5,302 | 100.0 | 73.9 | 13.3 | 3.2 | 9.6 |
| Day shift | 3,983 | 100.0 | 76.9 | 11.2 | 2.7 | 9.2 |
| Not a day shift | 1,319 | 100.0 | 64.9 | 19.7 | 4.7 | 10.7 |
| Employed part time | 2,801 | 100.0 | 47.1 | 28.4 | 8.6 | 15.9 |
| Day shift | 1,045 | 100.0 | 56.7 | 24.8 | 5.8 | 12.7 |
| Not a day shift | 1,756 | 100.0 | 41.4 | 30.5 | 10.2 | 17.9 |
| 5 to 14 Years | 10,798 | 100.0 | 68.5 | 12.8 | 5.9 | 12.8 |
| Employed full time | 7,396 | 100.0 | 75.6 | 9.6 | 4.0 | 10.8 |
| Day shift | 5,585 | 100.0 | 78.5 | 8.8 | 4.1 | 8.6 |
| Not a day shift | 1,811 | 100.0 | 66.7 | 12.3 | 2.5 | 18.5 |
| Employed part time | 3,403 | 100.0 | 53.0 | 19.6 | 10.2 | 17.2 |
| Day shift | 1,397 | 100.0 | 52.3 | 19.3 | 11.2 | 17.2 |
| Not a day shift | 2,006 | 100.0 | 53.4 | 19.8 | 9.3 | 17.5 |

**Child care arrangements by type of work shift.** Child care arrangements were mentioned more often by non-day shift workers as important reasons in choosing their schedule: do their arrangements reflect these concerns?

The answer is yes. Major differences are noted in the child care arrangements used by women according to the time of the day they worked (table 10). Among women with preschoolers who worked a day shift at their principal job, 41 percent had their children cared for in another home compared to 30 percent for women who worked in a non-day shift (figure 3).

Figure 3.
**Child Care Arrangements for Children Under 5 Years, by Shift-Work Status of Employed Mothers: Fall 1988**




Source: Table 10.

Use of organized child care facilities was also more prevalent among women working in day shifts accounting 30 percent of all child care arrangements. Since organized child care facilities often may not be available during evenings or weekends, women working non-day shifts used these facilities less frequently, amounting to 19 percent of all child care arrangements.

Working non-day rather than day shifts may offer more opportunities for women with preschoolers to provide care for their child at home, especially by the child's father. Overall, 41 percent of the pre-school age children of women working non-day shifts were cared for in their own home compared to 21 percent of the children of women working day shifts. In-home child care of preschoolers by fathers accounted for 26 percent of all arrangements used by women working non-day shifts compared to only 8 percent used by women working day shifts (table 10). In addition, child care provided by mothers while at work was also more frequently mentioned among women working non-day shifts than day shifts.

Among women with grade-school-age children working more traditional day shifts, 83 percent of the children were in school most of the time their mothers were working (table 10). Even among women working non-day shifts, 63 percent still reported that their children were in the school most of the time they were at work. The second most frequently used arrangement among non-day shift workers with grade-school-age children was care provided in the child's home (23 percent) principally by the child's father.

**Child care arrangements by dual-employed married couples.** Families often encounter difficulties in securing child care arrangements for their children if both parents are working the same hours during the day. In fall 1988, there were 13.7 million families with children under 15 years of age where both mother and father were employed (table G). Almost one-half (6.6 million) had both the husband and wife working day shifts with the majority of these couples (5 million) working full-time schedules during the day. Overall, 36 percent of all dual-employed married-couple families with children under 15 had both the husband and wife working full time in day shifts.

How do families who work daytime versus nighttime schedules cope with the problems of securing child care arrangements when both parents are at work? In circumstances where both parents work during the day, only 16 percent of 3.4 million preschoolers were cared for in their own home (table 11, column 2). In contrast, if both parents worked non-day shifts (column 5), 44 percent of these 0.8 million children were cared for in their own home. Among families where the parents work "split-shifts" (i.e., where one parent works a day shift and the other a non-day shift, columns 3 and 4), the proportion of children cared for in their own home is greater than when both parents work a day shift. It is likely that these families take advantage of the potential of having one parent at home to provide care for their child while the other is working.

With the exception of dual-employed families where both husband and wife work day shifts, the father is the principal provider of the in-home child care for preschoolers (figure 4). A study by Harriet Presser also concluded that "Reliance on spouses for child care when dual-earner couples are employed is much higher when respondents work non-days rather than days."[8]

Irrespective of the shift work or employment status (full/part time) of the parents, more than 50 percent of the grade-school-age children were in school most of their time their mothers were working. In-home care for these older children, however, ranged from 4 percent when both parents worked day shifts to about 25 percent when the mother worked a non-day shift, regardless of the father's work schedule (table 11).

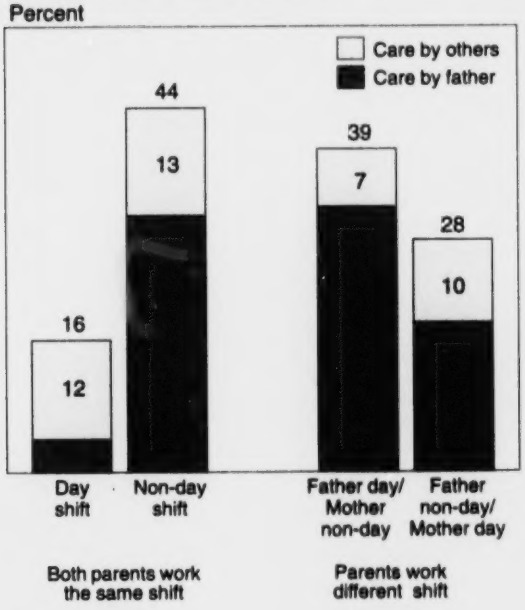
[8]H.B. Presser, "Shift Work and Child Care Among Young Dual-Earner American Parents," **Journal of Marriage and the Family**, Vol. 50 (February 1988), pp. 133-148.

**Table G. Number of Dual-Employed Married Couples with Children Under 15 Years, by Type of Work Shift of Their Principal Job: Fall 1988**

(In thousands)

| Type of work shift of mother, and age of youngest child | Total | Type of work shift of father | | | |
|---|---|---|---|---|---|
| | | Employed full time | | Employed part time | |
| | | Day shift | Not a day shift | Day shift | Not a day shift |
| Total | 13,691 | 9,993 | 2,928 | 207 | 564 |
| Employed full time | 8,675 | 6,376 | 1,848 | 113 | 338 |
| Day shift | 6,657 | 4,994 | 1,293 | 100 | 270 |
| Not a day shift | 2,018 | 1,382 | 555 | 13 | 68 |
| Employed part time | 5,015 | 3,616 | 1,080 | 95 | 226 |
| Day shift | 2,010 | 1,456 | 439 | 48 | 68 |
| Not a day shift | 3,005 | 2,160 | 641 | 47 | 158 |
| Under 5 Years | 6,323 | 4,454 | 1,490 | 86 | 293 |
| Employed full time | 4,025 | 2,873 | 929 | 41 | 183 |
| Day shift | 3,084 | 2,204 | 690 | 38 | 152 |
| Not a day shift | 941 | 669 | 239 | 3 | 30 |
| Employed part time | 2,298 | 1,581 | 561 | 45 | 111 |
| Day shift | 886 | 610 | 221 | 17 | 38 |
| Not a day shift | 1,412 | 971 | 340 | 28 | 73 |
| 5 to 14 Years | 7,368 | 5,539 | 1,438 | 121 | 270 |
| Employed full time | 4,651 | 3,504 | 920 | 71 | 155 |
| Day shift | 3,574 | 2,790 | 604 | 62 | 118 |
| Not a day shift | 1,077 | 714 | 316 | 9 | 38 |
| Employed part time | 2,718 | 2,035 | 519 | 49 | 115 |
| Day shift | 1,125 | 846 | 218 | 31 | 30 |
| Not a day shift | 1,593 | 1,188 | 300 | 19 | 85 |

Figure 4.
**Percent of Children Under 5 Years Cared for in Their Own Home, by Shift-Work Status of Parents: Fall 1988**




Source: Table 11.

## WORK DISRUPTIONS FROM FAILURES IN CHILD CARE ARRANGEMENTS

**Time lost from work: Who loses?** Some of the principal factors affecting a family's choice of child care arrangements include the quality and costs of the arrangements, proximity to work and home, and the reliability of child care provider during the parent's working hours. The last factor is also of concern to the employer since it directly affects the rate of absenteeism resulting from a failure in a child care arrangement.

Employed women were asked about the time they or their husbands lost from work during the reference month because the person who usually cared for their child (or children) was not available. The interviewer was instructed to include lost time from work resulting from a disruption if the respondent had to make an alternative child care arrangement. Child care arrangement failures could result from the provider not being available because of sickness, an emergency, a prior commitment, or some other reason. Sickness on the part of the child may have also been included if the usual provider was unable to care for the child and the parent had to stay home with the child or bring the child to the doctor's office.

Of the 19 million employed women with children under 15 years, 4.4 percent reported that they lost time

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from work in the last month as a result of a failure in a child care arrangement (table 5). No differences were noted in the incidence of time lost from work by the mother's marital status. This may have been because lost time from work was overwhelmingly the responsibility of the mother in the case of married women (table H). Of the 14 million employed married women with children under 15 years old, 3.7 percent reported that they alone lost time from work last month because of a failure in a child care arrangement (table H). In only 0.7 percent of the cases did only the husbands lose time from work if there was a failure in a child care arrangement.

Table H. **Time Lost From Work Due to Failures in Child Care Arrangements: Fall 1988**

(Numbers in thousands)

| Marital status, type of work shift, and employment status of the woman | Number of women | Percent losing time- | | |
|---|---|---|---|---|
| | | Woman only | Wife and husband | Husband only |
| **MARRIED, HUSBAND PRESENT** | | | | |
| Total | 14,262 | 3.7 | 0.6 | 0.7 |
| Day shift | 9,033 | 3.9 | 0.7 | 0.8 |
| Employed full time | 6,928 | 3.7 | 0.9 | 0.9 |
| Employed part time | 2,105 | 4.5 | 0.2 | 0.6 |
| Not a day shift | 5,229 | 3.5 | 0.3 | 0.6 |
| Employed full time | 2,021 | 3.5 | 0.7 | 0.6 |
| Employed part time | 3,208 | 3.5 | 0.1 | 0.6 |
| **ALL OTHER MARITAL STATUSES[1]** | | | | |
| Total | 4,640 | 4.4 | (X) | (X) |
| Day shift | 2,977 | 4.5 | (X) | (X) |
| Employed full time | 2,577 | 4.6 | (X) | (X) |
| Employed part time | 400 | 4.4 | (X) | (X) |
| Not a day shift | 1,663 | 4.2 | (X) | (X) |
| Employed full time | 1,025 | 4.5 | (X) | (X) |
| Employed part time | 638 | 3.8 | (X) | (X) |

X Not applicable.

[1]Includes married, husband absent (including separated), widowed, divorced, and never-married women.

**Time lost from work by child's age and arrangement.** Estimates of child care related work disruptions by the age of the youngest child in the family are shown in figure 5. Work disruptions from failures in child care arrangements affected 6.0 percent of the 1.5 million employed women with infants. Lost time from work was least among women whose youngest child was 12 or more years old (1.3 percent).

In addition, women who placed their children in an organized child care facility experienced slightly more work disruptions (5.1 percent) than if they were able to provide for care in their own home (2.4 percent, table 5). Children's exposure to health risks such as contact with other sick children may be more prevalent in child care centers than in home-based care and could result in lost time from work on the part of the mother[9].

## CHANGES IN CHILD CARE ARRANGEMENTS

This report so far has examined how families care for their children on a daily basis while mom is at work and the frequency of disruptions in the work schedule because of failures in child care arrangements. Now we will describe the stability of different child care arrangements and which arrangements change most often.

**Frequency of change.** Of the 19 million employed mothers with children under 15 years of age, 3 million, or about one-sixth, reported that they had changed their child's care arrangement in the 4 months prior to their interview (table 5). Only 8 percent of women whose youngest child was 12 to 14 years old reported changing arrangements, about one-half the rate of mothers with younger children.

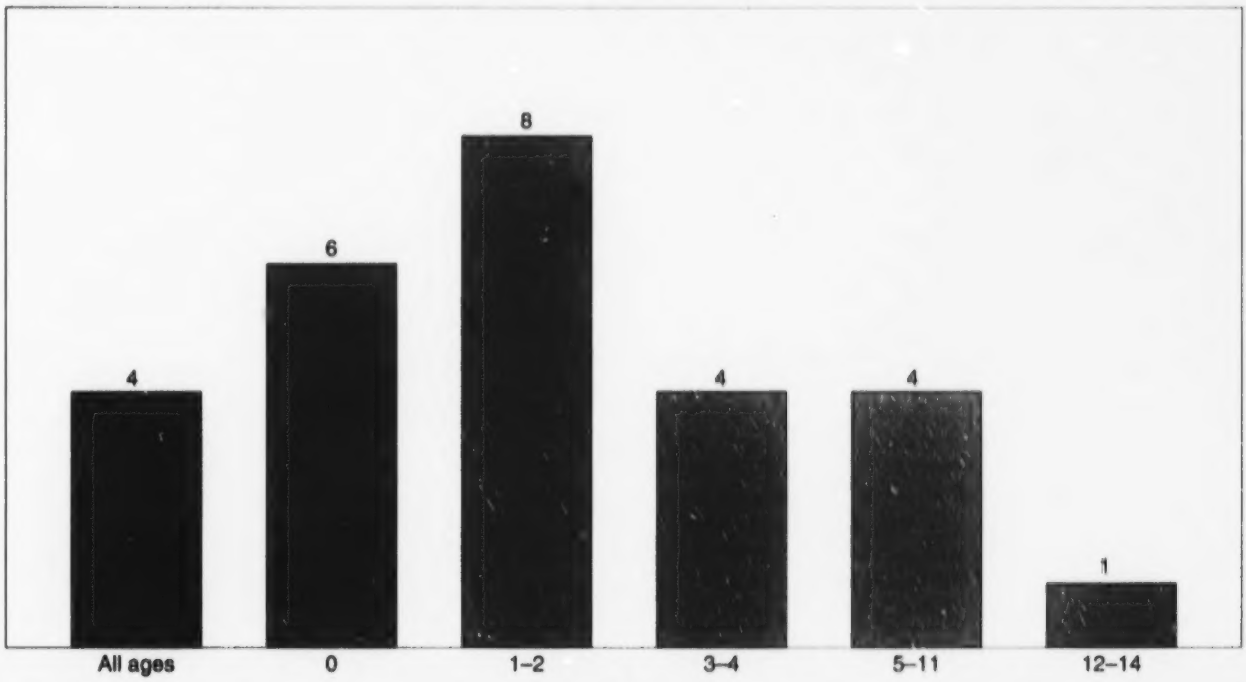
Also noted was the higher frequency of changes in arrangements among women who worked day shifts (17 percent) than non-day shifts (13 percent). It should be noted that the frequency of change reported in the survey may be different if the questions asked were referenced only for the school year when disruptions in arrangements due to school closings in the summer would be absent. The retrospective 4-month period in this report which covers the frequency of change questions, however, includes a time span for some respondents when schools were closed over the summer and then reopened in the fall.

**Changes among families with only children.** Because frequency of change questions were not asked for each individual child in the family, comparisons of frequency of change for specific child care arrangements can only be made for families with one child. In addition, the survey did not inquire about the arrangements used in the prior 4 months but only if a change had occurred in arrangements. These data, then, should not be interpreted as transition probabilities between arrangements since the prior arrangement was not known.

Children cared for in their own home experienced relatively few changes in arrangements (table 5). Only 7 percent of children cared for in their own home had changed arrangements in the last 4 months compared to 18 percent when children were cared for in someone else's home. Women who were currently using family day care providers (care in a nonrelative's home) reported more changes in arrangements in the last 4 months than women who were currently using in-home care.

[9]H.B. Presser, "Place of Child Care and Medicated Respiratory Illness Among Young American Children," **Journal of Marriage and the Family**, Vol. 50 (November 1988), pp. 995-1005.

Figure 5.
**Employed Mothers Losing Time from Work due to Failures in Child Care Arrangements, by Age of Youngest Child: Fall 1988**




Source: Table 5.

Twenty-five percent of women who used family day-care providers reported changing their arrangements in the last 4 months. If the current child care arrangement was provided by a grandparent in the grandparent's home, then only 8 percent of women changed their child's arrangement, suggesting more stability in arrangements among relatives than nonrelatives.

About 16 percent of women who were currently using organized child care facilities changed arrangements in the last 4 months (table 5). It is likely, however, that many of these centers and nursery schools were closed in the summer months causing the mother to have sought an alternative arrangement at some time in the last 4 months. About twice as many mothers using nursery schools changed arrangements in this period as did mothers who used day care centers.

**Reasons for change.** The principal reason for changing child care arrangements given by employed women in the survey was due to changes in the child's school enrollment. About one-half of all reasons given for changing arrangements fell in this category. This reason was especially pronounced for grade-school-age children, reaching about two-thirds of all women whose youngest child was of grade-school age (table I).

The second most frequently specified reason was because of a change in the mothers employment or school schedule (14 percent). Reasons of availability or reliability of child care arrangements each accounted for 9 percent of the reasons given by the mothers, more so for preschoolers than for children 12 to 14 years old. Surprisingly, concerns for child care costs were rather low (3 percent) on the list of reasons for changing child care arrangements.

## FAMILY EXPENDITURES ON CHILD CARE

**Overview.** Weekly expenses for child care arrangements shown in this section refer to the overall expenditures on child care that families make for all of their children under 15 years of age.[10] The questions on child care expenses were asked of parents only if any of their three youngest children under age 15 were cared for by a grandparent, other relative or a nonrelative, or if any

[10]Costs were also asked of women enrolled in school, unemployed women, and male guardians of children. The child care expenditures for these groups were very small relative to the total expenses for child care for families where mother was employed. Unless otherwise specified, child care costs shown in this report refer only to families where the mother was employed.

**Table I. Reasons for Changes in Child Care Arrangements: Fall 1988**

(Numbers in thousands. Data shown are limited to mothers who changed an arrangement in the last 4 months. Percentages total to more than 100.0 because of multiple answers)

| Reasons for changes in child care arrangement | Total | Age of children | | | | | Mother employed | | Type of shift | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Less than 1 year | 1 and 2 years | 3 and 4 years | 5 to 11 years | 12 to 14 years | Full time | Part time | Day shift | Not a day shift |
| Number of mothers | 2,960 | 244 | 608 | 482 | 1,391 | 235 | 2,019 | 941 | 2,072 | 888 |
| Child's school arrangement | 48.9 | 7.5 | 26.4 | 40.4 | 64.8 | 73.4 | 49.6 | 47.3 | 50.4 | 45.5 |
| Mother's job or school schedule | 14.2 | 17.8 | 17.7 | 16.9 | 12.1 | 8.4 | 12.3 | 18.3 | 13.4 | 16.1 |
| Cost | 2.5 | 7.6 | 1.6 | 3.1 | 2.2 | - | 2.3 | 3.0 | 2.8 | 1.8 |
| Availability or hours of care provider | 8.9 | 11.6 | 15.1 | 10.6 | 6.1 | 3.2 | 9.9 | 6.8 | 8.9 | 9.0 |
| Reliability of care provider/ quality or care provided | 8.5 | 17.8 | 13.7 | 13.3 | 3.4 | 5.7 | 9.1 | 7.2 | 9.3 | 6.7 |
| Location or accessibility to care provider | 4.0 | 6.4 | 6.0 | 5.9 | 2.3 | 2.2 | 3.9 | 4.3 | 4.6 | 2.6 |
| Found better/less expensive/ more convenient provider | 5.2 | 11.4 | 7.2 | 6.4 | 2.9 | - | 5.1 | 5.2 | 5.4 | 4.7 |
| All other reasons | 23.6 | 37.2 | 28.3 | 27.5 | 18.5 | 19.4 | 23.9 | 22.9 | 21.7 | 26.0 |

- Represents zero.

children were placed in day/group care centers, nursery/preschools or before/after school-based activities. Excluded were women who used only family members (i.e., child's father or siblings) or only kindergartens /grade schools, or if the child cared for himself or herself. Therefore, cash transfers to family members or payments for schooling were not included in child care costs.

In previous surveys only one question was asked to obtain information on the aggregate cost of child care for all children in the household. However, in the 1988 survey, specific questions on child care costs were asked individually for each child regarding both primary and secondary arrangements. Comparisons of 1988 child care costs with prior surveys should be made with these differences in survey design in mind.

Of the 18.8 million employed women with children under 15 years old in fall 1988, 40 percent (7.5 million) reported that they made a cash (money) payment for child care services for at least one of their children (table 6), up from 33 percent in 1987[11]. Average child care costs of $54 per week per family were paid by the families of employed women who reported such payments, amounting to an estimated annual expenditure of 21.1 billion dollars[12]. The average monthly family income of women who paid for child care services was $3,460 of which $1,396 (±$48) of this amount was their own personal income. Childcare payments represented about 6.8 percent of their total family income, not different from the 1987 estimate of 6.6 percent. We do not know what proportion of these child care expenditures were paid by the mother out of her own personal income.

[11]The 1987 estimates reported are from Current Population Reports, Series P-70, No. 20. op.cit., table 7B.

[12]The total cost of child care for 1988 for all families, including those with mothers enrolled in school or unemployed and with male guardians of children amounted to $22.5 billion (derived from table 6).

Table J shows child care costs estimated from four SIPP surveys conducted between winter 1984-85 and fall 1988. Since the first survey in winter 1984-85, child care costs have increased from $40.30 to $54.00 per week. However, $5.5 of this increase was the result of inflation.

**Table J. Weekly Cost of Child Care Per Family With Children Under 15 Years: Selected Periods, 1984 to 1988**

(Limited to families with employed mothers who paid cash for child care arrangements for any of their children)

| Period | Current dollars | | Constant dollars | |
|---|---|---|---|---|
| | Mean | Standard error | Mean | Standard error |
| Sept. to Dec. 1988 | $54.0 | $1.2 | $54.0 | $1.2 |
| Sept. to Nov. 1987 | 48.5 | 1.8 | 50.6 | 1.9 |
| Sept. to Nov. 1986 | 44.3 | 1.4 | 48.3 | 1.5 |
| Dec. 1984 to March 1985 | 40.3 | 1.1 | 45.8 | 1.3 |

Note: Constant dollar estimates were derived by using the consumer price index for all urban consumers for the specified periods from the Monthly Labor Review published by the Bureau of Labor Statistics.

**Age of children.** For women with preschool-age children, 68 percent made cash payments for the care of their children in fall 1988, compared to 19 percent for women whose youngest child was 5 years old and over (table 6). Women with preschoolers also paid more per week ($59) and spent a higher proportion of their monthly family income on child care (7 percent) than did women whose youngest child was 5 to 14 years old ($40 per week for child care expenses and 5 percent of family income on child care).

Women with three or more children paid an average of $11 more per week for child care than did women

who had only one child. Families with three or more children spent 7 percent of their monthly family income on child care compared to 6 percent for families with only one child in the household. It is likely that larger families had more older children of school age for which child care costs are less; larger families, then, do not necessarily result in higher or even comparable average child care costs per child. Data in table 6 also show that while married women spent more per week on child care ($56) than did unmarried women ($47), a smaller proportion of their monthly family income was spent on child care services (6 percent) than that of unmarried women (10 percent).

**Poverty and income.** About 8 percent of employed women (1.6 million) with children under 15 years old were living in poverty (table 6). Thirty percent of women living in poverty reported paying for child care services compared to 41 percent of women living above the poverty level. Women in poverty paid an average of $42 per week while women who were living in households above poverty level paid an average of $55 per week (figure 6). However, among women making child care payments, those in poverty spent a considerably higher proportion of their monthly family income on child care, 21 percent, compared to 7 percent among women living in families that were not in poverty (figure 7). The estimated average monthly family income of the women in the survey who were living in poverty and paying for child care was $879 per month compared to $3,633 per month for women living in families above the poverty line.

Women living in families with low monthly incomes also spent a major portion of their income on child care. Among women making child care payments, those in families whose monthly income was less than $1,500 per month spent 18 percent of their income on child care (table 6). At the other end of the income scale, families whose income was $4,500 and over per month spent only 5 percent of their family income on child care services. These disparities in child care expenditures as a percent of family income and poverty status were also noted in a report based on the 1990 National Child Care Survey.[13]

**Regional differences.** Table 6 shows that child care costs were about $14 per week higher in the Northeast ($64) than in the South ($50). This pattern of regional differences was also found in the 1986 and 1987 SIPP surveys.[14] Families in the Northeast reported that their child care expenditures made up about 8 percent of their monthly family income compared to 7 percent for families in the South.

**Comparison of SIPP and Internal Revenue Service estimates.** The Internal Revenue Service (IRS) in 1988 approved as tax credits child care costs for dependent children under 15 years of age of taxpayers while they were working or looking for work.[15] Qualified expenses include amounts paid for household services and care of the taxpayer's dependent child while he/she was at work or looking for work. Expenditures for child care related services outside of the child's home also qualified for the child care credit.

The maximum amount of these expenses to which the credit could be applied was the lesser of earned income or $2,400 for one qualifying child and the lesser of earned income or $4,800 for two or more children. The credit varied between 30 percent of these expenses for taxpayers with a adjusted gross income of $10,000 or less and 20 percent for taxpayers with an adjusted gross income of $28,000 or more. There are many more restrictions in claiming child care credits (e.g., exclusion of child care expenses while taxpayer is off from work because of illness or cost of sending child to an overnight camp) which may underestimate the total amount of money actually paid for child care.

The latest available information for tax year 1988 from the IRS indicates that $3.8 billion of tax credits were filed on 9 million individual tax returns.[16] Comparative data from the SIPP for fall 1988 show that 7.5 million employed women had at least one child under 15 years old and paid an estimated $21.1 billion for child care arrangements in 1988 (table 6). The following example indicates the differences between the actual cost of child care incurred and the amount of child care credits allowed to families by the IRS.

If a family paid $70 per week for the care of one child, their total child care costs for the year would be $3,640. If their adjusted gross income was over $28,000[17] the maximum amount of child credit they are allowed to claim would be $480 (20 percent of $2,400). This example illustrates that while families with working parents paid an estimated $21 billion for child care in 1988, only $3.8 billion was credited to these families by the IRS.

## COSTS OF INDIVIDUAL CHILD CARE ARRANGEMENTS

The data shown so far in this report on child care expenditures have focused on the number of families paying for child care arrangements. When estimating

[13]B. Willer, S.L. Hofferth, **et. al., The Demand and Supply of Child Care in 1990** (National Association for the Education of Young Children: Washington, D.C. 1991).

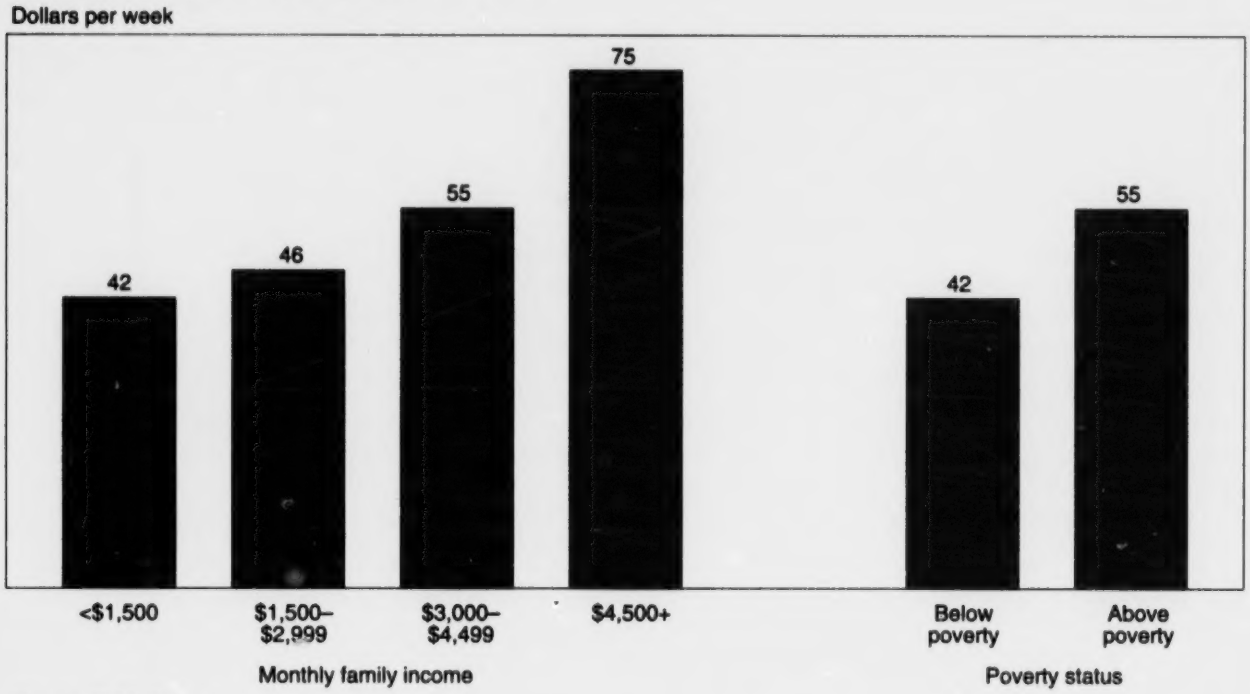
[14]Current Population Reports, Series P-70, No. 20, **op.cit.**, p. 12.

[15]Subsequent changes to the IRS codes have limited credits to children under 13 years old. More stringent provision in the tax forms now require the claimant to list the child's care provider's name, address, and social security or taxpayer identification number.

[16]Internal Revenue Service, "Individual Income Tax Returns, 1988," Statistics of the Income Division of the Internal Revenue Service, Publication No. 1304 (September 1991), table 1.4.

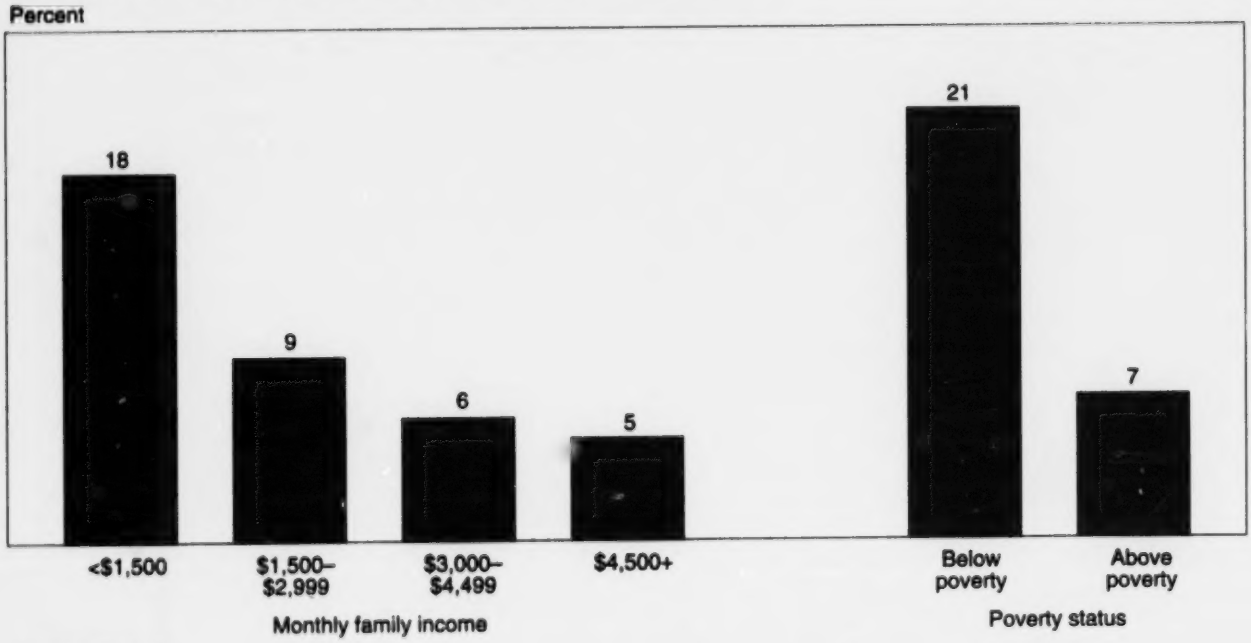
[17]The median family income of all married-couple families with a wife in the paid labor force in 1988 was $42,709 (Current Population Reports, Series P-60, No. 174, table 13).

Figure 6.
**Average Weekly Cost of Child Care: Fall 1988**




Source: Table 6.

Figure 7.
**Percent of Monthly Family Income Spent on Child Care: Fall 1988**




Source: Table 6.

the cost of individual arrangements, however, the unit of analysis becomes the arrangement itself rather than the number of children in the arrangement. For example, a family with three children may use a nursery school for the youngest child and pay a neighbor for after school care for the two older children. In this case there are only two types of paid arrangements (day care center and a neighbor) even though there are three children using the arrangements. In this example, the arrangement used only for the youngest child will be described as a "separate arrangement" while the arrangement used for the two older children by the neighbor will be described as a "shared arrangement."

**Separate and shared arrangements.** In fall 1988, 30 million children under 15 years of age of employed women used almost 42 million child care arrangements or 1.4 arrangements for each child. Of these 42 million arrangements, 31 million required no cash payments as over one-half of these were composed of kindergarten /grade school arrangements (table 7). Cash payments were required at least 90 percent of the time when family day-care providers or organized child care arrangements were used. Cash payments for arrangements were less frequently made when grandparents or other relatives were used.

Of the 11 million arrangements for which cash payments were made, 6.7 million children were in separate arrangements and another 4.4 million children were in shared arrangements for two or more siblings (table 7). Shared arrangements were more frequently used when care was provided for children in their own home (64 percent) than in another home (43 percent) or in organized child care facilities (25 percent). Shared arrangements were more frequently used when the youngest sibling was of grade-school-age (48 percent) than preschool age (34 percent). However, for both ages approximately one-half of all shared arrangements occurred in the home of the provider.

For purposes of computing child care costs, the 4.4 million children in shared arrangements shown in table 7 were further grouped to reflect the 2 million actual payments made for these arrangements (table K). On average, 2.2 children shared each paid arrangement. Child care costs per hour per child for the 6.7 million separately paid arrangements was $2.87 compared to $2.01 for the 2 million arrangement groups where child care services were shared.

**Child care costs for separate arrangements.** Women who have a failure in a child care arrangement may need to pay a higher premium for emergency care for a brief period of time. In addition, child care providers who may be willing to work for only a few hours per week may demand higher pay per hour to meet some minimum expenses or wage requirements on their part. Child care centers may also structure their pricing differently for daily users of their facilities as compared to families who contract for long term enrollment of their child.

Among families making separate payments for child care arrangements (table K), those using 10 or more

Table K. **Hourly Child Care Costs for Children of Employed Mothers, by Hours of Child Care Used Per Week: Fall 1988**

(Numbers of arrangements in thousands)

| Age of child and hours used per week | Payments made separately | | | Payments shared with others | | |
|---|---|---|---|---|---|---|
| | Number of arrangements | Cost per hour | | Number of arrangements groups | Cost per hour | |
| | | Mean[1] | Standard error | | Mean[1] | Standard error |
| **ALL CHILDREN** | | | | | | |
| Total | 6,710 | $2.87 | $0.12 | 1,962 | $2.01 | $0.18 |
| Less than 10 hours | 1,714 | 6.06 | 0.39 | 101 | (B) | (B) |
| 10 or more hours | 4,995 | 1.78 | 0.05 | 1,861 | 1.70 | 0.10 |
| **CHILDREN UNDER 5 YEARS[2]** | | | | | | |
| Total | 4,559 | $2.62 | $0.14 | 1,411 | $1.77 | $0.14 |
| Less than 10 hours | 868 | 6.49 | 0.55 | 41 | (B) | (B) |
| 10 or more hours | 3,691 | 1.71 | 0.06 | 1,371 | 1.71 | 0.13 |
| **CHILDREN 5 to 14 YEARS[2]** | | | | | | |
| Total | 2,150 | $3.41 | $0.25 | 550 | $2.61 | $0.57 |
| Less than 10 hours | 846 | 5.61 | 0.53 | 60 | (B) | (B) |
| 10 or more hours | 1,301 | 1.96 | 0.10 | 490 | 1.67 | 0.13 |

B Base less than 200,000.
[1] Average individual costs per hour per child for each arrangement.
[2] For shared arrangements, age refers to age of youngest child in arrangement.

hours of child care per week made lower hourly payments ($1.78) than those using less than 10 hours of child care ($6.06). On average, families using child care for less than 10 hours a week used these arrangements for little more than one hour per weekday (5.8 hours week) and paid $31 per week.[18]

When parents used family day-care providers for less than 10 hours a week (5.7 hours on average), they paid $5.46 per hour for this arrangement. In comparison, parents who used family day-care providers for more than 10 hours per week (30.4 hours on average) paid $1.63 per hour (table 8). Large differences in expenditures by hourly usage of day/group care centers were also found: women who used this arrangement for less than 10 hours per week paid $8.00 an hour vs. $1.85 an hour when used more than 10 hours per week (table 8). The above examples indicate that families who use child care services for less than 10 hours a week may pay unusually high hourly child care costs which are atypical of persons using arrangements most of the day throughout the week.

**Child care costs for shared arrangements.** In an attempt to estimate typical child care costs of families who use separate and shared arrangements for more than a couple of hours a day, table L in this report shows the hourly costs of child care for families who used arrangements for at least 10 hours per week. These criteria were met by about 5 million arrangements for which payments are made separately and for 1.9 million arrangement groups for which payments are shared (table K).

[18]Data discussed in this section for detailed child care arrangements used less than 10 hours per week are from unpublished table not shown in this report.

Table L. **Hourly Child Care Costs for Children of Employed Mothers, by Type of Child Care Arrangement: Fall 1988**

(Limted to arrangements used for 10 or more hours per week)

| Age of child and type of arrangement | Payment made separately | | Payment shared with others | |
|---|---|---|---|---|
| | Mean | Standard error | Mean | Standard error |
| **ALL CHILDREN** | | | | |
| Total[1] | $1.78 | $0.05 | $1.70 | $0.10 |
| By relative | 1.38 | 0.09 | 0.99 | 0.13 |
| Grandparent | 1.42 | 0.15 | 1.06 | 0.17 |
| Other relative | 1.34 | 0.12 | (B) | (B) |
| By nonrelative | 1.76 | 0.06 | 1.78 | 0.14 |
| In child's home | 2.61 | 0.39 | 2.35 | 0.31 |
| In another home | 1.63 | 0.06 | 1.52 | 0.14 |
| Organized child care facilities | 1.91 | 0.09 | 1.95 | 0.23 |
| Day/group care | 1.85 | 0.12 | 1.95 | 0.26 |
| Nursery/preschool | 2.02 | 0.14 | (B) | (B) |
| **CHILDREN UNDER 5 YEARS[2]** | | | | |
| Total | $1.71 | $0.06 | $1.71 | $0.13 |
| By relative | 1.26 | 0.09 | 0.93 | 0.14 |
| Grandparent | 1.19 | 0.15 | (B) | (B) |
| Other relative | 1.32 | 0.12 | (B) | (B) |
| By nonrelative | 1.75 | 0.10 | 1.89 | 0.19 |
| In child's home | (B) | (B) | 2.69 | 0.46 |
| In another home | 1.59 | 0.08 | 1.59 | 0.19 |
| Organized child care facilities | 1.83 | 0.10 | 1.86 | 0.26 |
| Day/group care | 1.70 | 0.13 | 1.84 | 0.28 |
| Nursery/preschool | 2.07 | 0.15 | (B) | (B) |
| **CHILDREN 5 to 14 YEARS[2]** | | | | |
| Total[1] | $1.98 | $0.10 | $1.67 | $0.13 |
| By relative | (B) | (B) | (B) | (B) |
| Grandparent | (B) | (B) | (B) | (B) |
| Other relative | (B) | (B) | (B) | (B) |
| By nonrelative | 1.81 | 0.12 | 1.51 | 0.13 |
| In child's home | (B) | (B) | (B) | (B) |
| In another home | 1.77 | 0.13 | 1.34 | 0.12 |
| Organized child care facilities | 2.12 | 0.19 | (B) | (B) |
| Day/group care | 2.22 | 0.22 | (B) | (B) |
| Nursery/preschool | (B) | (B) | (B) | (B) |

B Base less than 200,000.

[1]Includes arrangements not shown separately.

[2]For shared arrangements, age refers to age of youngest child in the arrangement.

Child care costs for all children under 15 using separately paid arrangements were estimated at $1.78 per hour, not significantly different from hourly costs ($1.70) when two or more children shared the same provider (table L).[19] For children under 5 years old, child care costs were $1.71 an hour regardless of whether payments were made separately or shared. A reduction in hourly costs, however, did occur among older children when arrangements were shared, as parents of older children who shared the same provider received a $0.31 per hour discount per child.

Data in table L show that reductions in hourly child care costs occurred only when the child's relatives, especially their grandparents, provided the care. When payments were made separately, care by relatives cost $1.38 per hour for all children, compared to $0.99 per hour when shared payments were made. No reductions in hourly costs were noted when payments were shared for either nonrelative care or for care in organized child care facilities.

The hourly costs of child care by a nonrelative, when payments were made separately or shared, were about one dollar more when the care provider came to the child's home than when the child was brought to the provider's home. This difference may result from the extra transportation costs and the general inconvenience experienced by the provider. However, this larger payment may also reflect the fact that the provider in the child's home may be asked to do other household chores in addition to baby sitting.

## NOTE ON ESTIMATES

Estimates of primary and secondary child care arrangements shown in this report are based on respondents' answers to the question of what their child was usually doing during the time that they were at work or enrolled in school. The estimates of the number of children being left unsupervised by an adult during this period may be underestimated by those respondents who perceive that leaving the child unattended may be interpreted as an undesirable response. In some cases, parents—out of concern for their child's safety—may be unwilling to reveal their child's whereabouts when asked about this subject. The misreporting of any specific child care arrangement may affect the overall distribution of child care arrangements shown in this report. In all cases, the interviewer accepted the respondent's answers and did not question the validity of the response.

[19]When arrangements were shared, the total amount of time spent by all children was used as the denominator in computing the hourly costs of the shared arrangements.

## USER COMMENTS

We are interested in your reaction to the usefulness of the information presented in this report and the content of the subject area covered in the questionnaire (see appendix E for a facsimile of the questionnaire). We welcome your recommendations for improving our survey work and reports. If your have suggestions or comments, please send them to:

Current Survey Comments
Population Division
Bureau of the Census
Washington, DC 20233-3400

If you prefer you can contact the authors of this report at 301-763-5303.

Table 1. **Primary Child Care Arrangements Used by Mothers for Children Under 15 Years, by Marital and Employment Status of Mothers: Fall 1988**

(In thousands)

| Marital status and type of arrangement | All children | | | Children under 5 years | | | Children 5 to 14 years | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Employed full time | Employed part time | Total | Employed full time | Employed part time | Total | Employed full time | Employed part time |
| **ALL MARITAL STATUSES** | | | | | | | | | |
| Total | 30,287 | 19,678 | 10,609 | 9,483 | 5,969 | 3,514 | 20,804 | 13,709 | 7,094 |
| Care in child's home | 5,158 | 2,582 | 2,577 | 2,678 | 1,242 | 1,436 | 2,480 | 1,340 | 1,141 |
| By father | 2,906 | 1,155 | 1,751 | 1,433 | 495 | 938 | 1,473 | 660 | 814 |
| By grandparent | 770 | 523 | 247 | 539 | 339 | 200 | 232 | 184 | 47 |
| By other relative | 671 | 443 | 228 | 207 | 130 | 77 | 464 | 314 | 150 |
| By nonrelative | 811 | 460 | 351 | 500 | 278 | 221 | 311 | 182 | 129 |
| Care in another home | 4,323 | 3,082 | 1,241 | 3,491 | 2,486 | 1,004 | 833 | 596 | 236 |
| By grandparent | 1,060 | 774 | 286 | 778 | 563 | 215 | 282 | 212 | 71 |
| By other relative | 623 | 393 | 230 | 476 | 299 | 177 | 147 | 94 | 53 |
| By nonrelative | 2,640 | 1,915 | 725 | 2,237 | 1,624 | 612 | 403 | 291 | 113 |
| Organized child care facilities | 2,977 | 2,223 | 754 | 2,451 | 1,841 | 610 | 526 | 382 | 144 |
| Day/group care center | 1,931 | 1,479 | 452 | 1,575 | 1,220 | 356 | 356 | 260 | 96 |
| Nursery school/preschool | 1,045 | 744 | 301 | 875 | 622 | 254 | 170 | 122 | 48 |
| School-based activity | 361 | 256 | 105 | 15 | 6 | 9 | 346 | 250 | 96 |
| Kindergarten/grade school | 15,832 | 10,785 | 5,047 | 121 | 85 | 36 | 15,711 | 10,700 | 5,011 |
| Child cares for self | 481 | 309 | 172 | 5 | 5 | - | 476 | 304 | 172 |
| Mother cares for child at work[1] | 1,155 | 442 | 713 | 723 | 304 | 419 | 433 | 138 | 295 |
| **MARRIED, HUSBAND PRESENT** | | | | | | | | | |
| Total | 23,868 | 14,673 | 9,196 | 7,846 | 4,802 | 3,044 | 16,022 | 9,871 | 6,151 |
| Care in child's home | 4,226 | 1,930 | 2,297 | 2,215 | 941 | 1,274 | 2,011 | 989 | 1,023 |
| By father | 2,869 | 1,134 | 1,735 | 1,408 | 480 | 928 | 1,461 | 654 | 807 |
| By grandparent | 396 | 267 | 129 | 284 | 177 | 107 | 112 | 90 | 22 |
| By other relative | 363 | 207 | 156 | 90 | 47 | 42 | 273 | 159 | 114 |
| By nonrelative | 598 | 322 | 277 | 433 | 237 | 197 | 165 | 85 | 80 |
| Care in another home | 3,348 | 2,376 | 972 | 2,845 | 2,045 | 800 | 503 | 332 | 171 |
| By grandparent | 814 | 571 | 243 | 642 | 462 | 179 | 172 | 108 | 64 |
| By other relative | 395 | 234 | 161 | 340 | 205 | 134 | 55 | 28 | 27 |
| By nonrelative | 2,139 | 1,572 | 568 | 1,863 | 1,377 | 487 | 276 | 195 | 81 |
| Organized child care facilities | 2,357 | 1,699 | 658 | 1,995 | 1,456 | 540 | 361 | 243 | 119 |
| Day/group care center | 1,485 | 1,101 | 384 | 1,260 | 947 | 313 | 225 | 154 | 71 |
| Nursery school/preschool | 872 | 597 | 275 | 735 | 508 | 227 | 136 | 89 | 48 |
| School-based activity | 250 | 163 | 87 | 15 | 6 | 9 | 235 | 157 | 78 |
| Kindergarten/grade school | 12,277 | 7,888 | 4,389 | 87 | 61 | 26 | 12,190 | 7,827 | 4,362 |
| Child cares for self | 313 | 200 | 113 | 5 | 5 | - | 308 | 195 | 113 |
| Mother cares for child at work[1] | 1,097 | 417 | 680 | 683 | 289 | 394 | 414 | 128 | 286 |
| **ALL OTHER MARITAL STATUSES[2]** | | | | | | | | | |
| Total | 6,419 | 5,006 | 1,413 | 1,637 | 1,167 | 470 | 4,781 | 3,838 | 943 |
| Care in child's home | 932 | 652 | 280 | 463 | 301 | 162 | 469 | 351 | 118 |
| By father | 37 | 21 | 16 | 24 | 15 | 9 | 13 | 6 | 7 |
| By grandparent | 375 | 257 | 118 | 255 | 162 | 93 | 120 | 94 | 25 |
| By other relative | 308 | 236 | 71 | 117 | 82 | 35 | 190 | 154 | 36 |
| By nonrelative | 212 | 138 | 74 | 66 | 42 | 25 | 146 | 97 | 49 |
| Care in another home | 975 | 706 | 269 | 646 | 442 | 204 | 330 | 264 | 65 |
| By grandparent | 246 | 203 | 42 | 136 | 100 | 36 | 110 | 103 | 7 |
| By other relative | 228 | 159 | 69 | 136 | 94 | 43 | 92 | 66 | 27 |
| By nonrelative | 501 | 343 | 157 | 373 | 248 | 126 | 128 | 96 | 32 |
| Organized child care facilities | 620 | 525 | 95 | 455 | 386 | 70 | 165 | 139 | 26 |
| Day/group care center | 446 | 378 | 69 | 315 | 272 | 43 | 131 | 105 | 26 |
| Nursery school/preschool | 174 | 147 | 27 | 140 | 113 | 27 | 34 | 34 | - |
| School-based activity | 111 | 93 | 18 | - | - | - | 111 | 93 | 18 |
| Kindergarten/grade school | 3,555 | 2,896 | 658 | 34 | 24 | 10 | 3,521 | 2,872 | 648 |
| Child cares for self | 168 | 109 | 59 | - | - | - | 168 | 109 | 59 |
| Mother cares for child at work[1] | 58 | 25 | 33 | 39 | 15 | 24 | 19 | 10 | 9 |

-Represents zero.

[1] Includes mothers working at home or away from home.

[2] Includes married, husband absent (including separated), widowed, divorced, and never-married mothers.



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## Table 2. Primary Child Care Arrangements Used by Employed Mothers for Children Under 5 Years, by Characteristics of Mothers: Fall 1988

(In thousands)

| Characteristic | Type of primary child care arrangement | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number of children | Care in child's home by- | | | | Care in another home by- | | | Day/ group care center | Nursery/ pre-school | School-based activity | Kinder-garten/ grade school | Child cares for self | Mother cares for child[1] |
| | | Father | Grand-parent | Other relative | Non-relative | Grand-parent | Other relative | Non-relative | | | | | | |
| Total | 9,483 | 1,433 | 539 | 207 | 500 | 778 | 476 | 2,237 | 1,575 | 875 | 15 | 121 | 5 | 723 |
| Race: | | | | | | | | | | | | | | |
| White | 7,919 | 1,307 | 405 | 119 | 442 | 586 | 328 | 1,975 | 1,255 | 738 | 15 | 83 | 5 | 661 |
| Black | 1,270 | 86 | 100 | 72 | 35 | 152 | 137 | 221 | 277 | 124 | - | 28 | - | 38 |
| Hispanic origin: | | | | | | | | | | | | | | |
| Hispanic | 808 | 92 | 63 | 24 | 35 | 74 | 38 | 221 | 103 | 84 | - | 10 | - | 67 |
| Not Hispanic | 8,675 | 1,341 | 476 | 183 | 464 | 704 | 440 | 2,016 | 1,473 | 792 | 15 | 111 | 5 | 655 |
| Marital status: | | | | | | | | | | | | | | |
| Married, spouse present | 7,846 | 1,408 | 284 | 90 | 433 | 642 | 340 | 1,863 | 1,260 | 735 | 15 | 87 | 5 | 683 |
| All other marital statuses[2] | 1,637 | 24 | 255 | 117 | 66 | 136 | 136 | 373 | 315 | 140 | - | 34 | - | 39 |
| Age of child: | | | | | | | | | | | | | | |
| Less than 1 year | 1,523 | 249 | 108 | 36 | 82 | 160 | 69 | 392 | 245 | 32 | - | - | 5 | 144 |
| 1 and 2 years | 3,925 | 596 | 290 | 93 | 253 | 363 | 230 | 1,029 | 595 | 196 | 8 | - | - | 273 |
| 3 and 4 years | 4,035 | 587 | 141 | 78 | 164 | 255 | 178 | 816 | 734 | 648 | 7 | 121 | - | 306 |
| Educational attainment: | | | | | | | | | | | | | | |
| Less than high school | 1,030 | 148 | 104 | 74 | 36 | 100 | 92 | 202 | 108 | 63 | - | 18 | - | 85 |
| High school | 3,948 | 653 | 286 | 62 | 111 | 407 | 220 | 952 | 564 | 282 | 2 | 44 | 5 | 361 |
| College, 1 to 3 years | 2,304 | 352 | 68 | 49 | 122 | 184 | 116 | 496 | 426 | 262 | 13 | 31 | - | 184 |
| College, 4 or more years | 2,201 | 280 | 80 | 22 | 231 | 87 | 49 | 587 | 478 | 269 | - | 28 | - | 92 |
| Employment status: | | | | | | | | | | | | | | |
| Full time | 5,969 | 495 | 339 | 130 | 278 | 583 | 299 | 1,824 | 1,220 | 622 | 6 | 85 | 5 | 304 |
| Part time | 3,514 | 938 | 200 | 77 | 221 | 215 | 177 | 612 | 356 | 254 | 9 | 36 | - | 419 |
| Occupation:[3] | | | | | | | | | | | | | | |
| Managerial-professional | 2,503 | 360 | 97 | 19 | 212 | 124 | 58 | 615 | 530 | 338 | 9 | 39 | - | 101 |
| Technical, sales, and administrative support | 4,055 | 574 | 228 | 82 | 165 | 410 | 223 | 962 | 696 | 351 | 6 | 6 | 5 | 287 |
| Service occupations | 1,722 | 363 | 117 | 48 | 69 | 126 | 83 | 295 | 214 | 107 | - | 11 | - | 291 |
| Farming, forestry, and fishing | 68 | - | - | 10 | - | - | 12 | 12 | 10 | - | - | - | - | 24 |
| Precision production, craft, and repair | 181 | 26 | 17 | - | 4 | 26 | 12 | 40 | 27 | 18 | - | 4 | - | 7 |
| Operators, fabricators, and laborers | 938 | 109 | 76 | 47 | 50 | 92 | 89 | 289 | 95 | 59 | - | 20 | - | 12 |
| Monthly family income:[4] | | | | | | | | | | | | | | |
| Less than $1,500 | 1,624 | 242 | 123 | 70 | 36 | 156 | 138 | 327 | 243 | 82 | - | 20 | - | 187 |
| $1,500 to $2,999 | 3,542 | 625 | 181 | 70 | 145 | 322 | 225 | 784 | 559 | 280 | 12 | 41 | 5 | 293 |
| $3,000 to $4,499 | 2,508 | 387 | 127 | 33 | 122 | 202 | 75 | 674 | 443 | 272 | 3 | 35 | - | 135 |
| $4,500 and over | 1,787 | 178 | 108 | 32 | 197 | 99 | 35 | 444 | 320 | 242 | - | 25 | - | 107 |
| Poverty level:[4] | | | | | | | | | | | | | | |
| Below poverty level | 833 | 125 | 96 | 34 | 19 | 66 | 60 | 157 | 106 | 67 | - | 7 | - | 94 |
| Above poverty level | 8,628 | 1,307 | 442 | 171 | 480 | 711 | 414 | 2,071 | 1,459 | 809 | 15 | 114 | 5 | 628 |
| Region of residence: | | | | | | | | | | | | | | |
| Northeast | 1,669 | 396 | 95 | 44 | 131 | 112 | 104 | 339 | 210 | 134 | 13 | 18 | - | 72 |
| Midwest | 2,569 | 384 | 168 | 83 | 119 | 169 | 143 | 716 | 408 | 136 | - | 25 | - | 219 |
| South | 3,273 | 401 | 157 | 52 | 149 | 335 | 147 | 681 | 649 | 427 | 2 | 67 | 5 | 201 |
| West | 1,973 | 251 | 118 | 29 | 101 | 161 | 82 | 500 | 309 | 179 | - | 12 | - | 231 |
| Metropolitan residence: | | | | | | | | | | | | | | |
| Metropolitan | 7,108 | 1,105 | 426 | 167 | 390 | 535 | 323 | 1,810 | 1,198 | 762 | 15 | 104 | 5 | 466 |
| In central cities | 2,874 | 406 | 217 | 99 | 142 | 233 | 171 | 688 | 436 | 293 | 3 | 46 | 5 | 132 |
| Outside central cities | 4,234 | 699 | 210 | 68 | 247 | 302 | 152 | 922 | 760 | 469 | 12 | 59 | - | 334 |
| Nonmetropolitan | 2,375 | 328 | 112 | 40 | 110 | 242 | 153 | 626 | 377 | 113 | - | 17 | - | 25 |

-Represents zero.
[1]Includes mothers working at home or away from home.
[2]Includes married, husband absent (including separated), widowed, divorced, and never-married mothers.
[3]Excludes mothers in the Armed Forces.
[4]Omits persons who did not report family income.

## Table 3. Child Care Arrangements Used by Employed Mothers for Children 5 to 14 Years: Fall 1988

(Numbers in thousands)

| Type of arrangement | 5 to 14 years | | 5 years | | 6 to 11 years | | 12 to 14 years | |
|---|---|---|---|---|---|---|---|---|
| | Total | Percent | Total | Percent | Total | Percent | Total | Percent |
| **PRIMARY ARRANGEMENT** | | | | | | | | |
| Total | 20,804 | 100.0 | 2,144 | 100.0 | 12,548 | 100.0 | 6,112 | 100.0 |
| Care in child's home | 2,480 | 11.9 | 341 | 15.9 | 1,540 | 12.3 | 599 | 9.8 |
| By father | 1,473 | 7.1 | 244 | 11.4 | 897 | 7.2 | 332 | 5.4 |
| By grandparent | 232 | 1.1 | 42 | 1.9 | 141 | 1.1 | 49 | 0.8 |
| By other relative | 464 | 2.2 | 14 | 0.7 | 286 | 2.3 | 163 | 2.7 |
| By nonrelative | 311 | 1.5 | 41 | 1.9 | 216 | 1.7 | 54 | 0 9 |
| Care in another home | 833 | 4.0 | 316 | 14.7 | 401 | 3.2 | 116 | 1.9 |
| By grandparent | 282 | 1.4 | 76 | 3.5 | 139 | 1.1 | 68 | 1.1 |
| By other relative | 147 | 0.7 | 52 | 2.4 | 79 | 0.6 | 16 | 0.3 |
| By nonrelative | 403 | 1.9 | 188 | 8.8 | 183 | 1.5 | 32 | 0.5 |
| Organized child care facilities | 526 | 2.5 | 409 | 19.1 | 113 | 0.9 | 4 | 0.1 |
| Day/group care center | 356 | 1.7 | 239 | 11.2 | 113 | 0.9 | 4 | 0.1 |
| Nursery/preschool | 170 | 0.8 | 170 | 7.9 | - | - | - | - |
| School-based activity | 346 | 1.7 | 35 | 1.7 | 232 | 1.9 | 79 | 1.3 |
| Kindergarten/grade school | 15,711 | 75.5 | 926 | 43.2 | 9,911 | 79.0 | 4,874 | 79.8 |
| Child cares for self | 476 | 2.3 | - | - | 135 | 1.1 | 340 | 5.6 |
| Mother cares for child at work[1] | 433 | 2.1 | 117 | 5.5 | 216 | 1.7 | 100 | 1.6 |
| **PRIMARY ARRANGEMENT EXCLUDING CHILD'S TIME IN SCHOOL** | | | | | | | | |
| Total | 20,804 | 100.0 | 2,144 | 100.0 | 12,548 | 100.0 | 6,112 | 100.0 |
| Care in child's home | 5,033 | 24.2 | 495 | 23.1 | 3,410 | 27.2 | 1,128 | 18.5 |
| By father | 2,491 | 12.0 | 299 | 13.9 | 1,633 | 13.0 | 559 | 9.1 |
| By grandparent | 620 | 3.0 | 71 | 3.3 | 429 | 3.4 | 121 | 2.0 |
| By other relative | 1,250 | 6.0 | 51 | 2.4 | 836 | 6.7 | 364 | 6.0 |
| By nonrelative | 672 | 3.2 | 75 | 3.5 | 513 | 4.1 | 84 | 1.4 |
| Care in another home | 3,014 | 14.5 | 596 | 27.8 | 2,038 | 16.2 | 379 | 6.2 |
| By grandparent | 1,000 | 4.8 | 162 | 7.6 | 670 | 5.3 | 167 | 2.7 |
| By other relative | 340 | 1.6 | 87 | 4.1 | 203 | 1.6 | 50 | 0.8 |
| By nonrelative | 1,673 | 8.0 | 347 | 16.2 | 1,164 | 9.3 | 162 | 2.7 |
| Organized child care facilities | 1,171 | 5.6 | 529 | 24.7 | 623 | 5.0 | 18 | 0.3 |
| Day/group care center | 985 | 4.7 | 344 | 16.0 | 623 | 5.0 | 18 | 0.3 |
| Nursery/preschool | 186 | 0.9 | 186 | 8.7 | - | - | - | - |
| School-based activity[2] | 677 | 3.3 | 65 | 3.0 | 464 | 3.7 | 148 | 2.4 |
| Child cares for self | 1,401 | 6.7 | - | - | 517 | 4.1 | 885 | 14.5 |
| No care mentioned: | 8,754 | 42.1 | 301 | 14.0 | 5,063 | 40.3 | 3,390 | 55.5 |
| Work hours > time in school | 5,699 | 27.4 | 184 | 8.6 | 3,267 | 26.0 | 2,248 | 36.8 |
| Work hours < = time in school | 3,055 | 14.7 | 117 | 5.4 | 1,796 | 14.3 | 1,142 | 18.7 |
| Mother cares for child at work[1] | 754 | 3.6 | 159 | 7.4 | 432 | 3.4 | 164 | 2.7 |

-Represents zero

[1]Includes women working at home or away from home.

[2]Includes a small number of children (17,000) who used school as their secondary arrangement.

## Table 4. Children of Employed Mothers Using Secondary Child Care Arrangements, by Age of Child and Type of Primary Care Arrangement: Fall 1988

(In thousands)

| Age of child and type of primary arrangement | All children | Type of secondary arrangement | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Care in child's home by- | | | | | Care in another home by- | | | | Organized child care | | | School-based activity | Kindergarten/grade school | Child cares for self | Mother cares for child[1] | No secondary care used |
| | | Total | Father | Grandparent | Other relative | Nonrelative | Total | Grandparent | Other relative | Nonrelative | Total | Day/group care center | Nursery/preschool | | | | | |
| **ALL CHILDREN** | | | | | | | | | | | | | | | | | | |
| Total | 30,287 | 3,794 | 1,647 | 541 | 978 | 629 | 3,024 | 1,047 | 388 | 1,589 | 997 | 765 | 232 | 345 | 468 | 972 | 387 | 20,300 |
| Care in child's home | 5,158 | 407 | 106 | 62 | 100 | 140 | 315 | 115 | 71 | 130 | 103 | 47 | 56 | 8 | 183 | 35 | 16 | 4,091 |
| By father | 2,906 | 226 | - | 18 | 81 | 127 | 265 | 105 | 50 | 110 | 45 | 36 | 10 | 4 | 112 | 35 | 4 | 2,214 |
| By grandparent | 770 | 56 | 19 | 18 | 14 | 5 | 13 | - | 6 | 7 | 30 | 7 | 24 | - | 22 | - | - | 649 |
| By other relative | 671 | 23 | 8 | 11 | 1 | 4 | 13 | 4 | 7 | 3 | - | - | - | - | 19 | - | - | 616 |
| By nonrelative | 811 | 102 | 79 | 15 | 3 | 4 | 24 | 6 | 8 | 9 | 27 | 5 | 23 | 4 | 30 | - | 12 | 612 |
| Care in another home | 4,323 | 413 | 290 | 44 | 46 | 33 | 163 | 68 | 62 | 32 | 123 | 22 | 101 | 4 | 142 | - | 25 | 3,452 |
| By grandparent | 1,060 | 97 | 61 | 4 | 16 | 16 | 33 | - | 17 | 16 | 24 | 6 | 19 | 4 | 14 | - | 9 | 879 |
| By other relative | 623 | 47 | 33 | 3 | 4 | 7 | 30 | 15 | 12 | 3 | 17 | 5 | 13 | - | 15 | - | - | 514 |
| By nonrelative | 2,640 | 270 | 196 | 37 | 26 | 11 | 100 | 53 | 34 | 14 | 82 | 12 | 70 | - | 113 | - | 16 | 2,060 |
| Organized child care facilities | 2,977 | 312 | 182 | 27 | 28 | 75 | 301 | 132 | 42 | 127 | 63 | 41 | 22 | 5 | 70 | - | 19 | 2,207 |
| Day/group care center | 1,931 | 170 | 129 | 8 | 19 | 13 | 124 | 87 | 22 | 14 | 26 | 4 | 22 | - | 67 | - | - | 1,545 |
| Nursery/preschool | 1,045 | 142 | 52 | 19 | 9 | 62 | 177 | 45 | 20 | 112 | 37 | 37 | - | 5 | 3 | - | 19 | 663 |
| School-based activity | 361 | 28 | 11 | - | 9 | 8 | 15 | 4 | 3 | 8 | 12 | 12 | - | 4 | 9 | 11 | - | 282 |
| Kindergarten/grade school | 15,832 | 2,570 | 1,024 | 394 | 791 | 361 | 2,201 | 717 | 209 | 1,275 | 659 | 643 | 16 | 319 | 17 | 926 | 327 | 8,813 |
| Child cares for self | 481 | 16 | - | 4 | 5 | 7 | 4 | - | - | 4 | - | - | - | - | 6 | - | - | 455 |
| Mother cares for child at work[1] | 1,155 | 48 | 34 | 10 | - | 4 | 25 | 10 | - | 14 | 37 | - | 37 | 5 | 41 | - | - | 999 |
| **CHILDREN UNDER 5 YEARS** | | | | | | | | | | | | | | | | | | |
| Total | 9,483 | 893 | 503 | 119 | 104 | 167 | 645 | 247 | 162 | 236 | 283 | 104 | 179 | 10 | - | - | 60 | 7,593 |
| Care in child's home | 2,678 | 248 | 74 | 54 | 41 | 79 | 226 | 80 | 57 | 89 | 99 | 43 | 56 | - | - | - | 16 | 2,088 |
| By father | 1,433 | 127 | - | 18 | 33 | 76 | 200 | 80 | 41 | 79 | 42 | 32 | 10 | - | - | - | 4 | 1,069 |
| By grandparent | 539 | 34 | 19 | 10 | 5 | - | 13 | - | 6 | 7 | 30 | 7 | 24 | - | - | - | - | 461 |
| By other relative | 207 | 19 | 4 | 11 | - | 4 | 7 | - | 7 | - | - | - | - | - | - | - | - | 182 |
| By nonrelative | 500 | 69 | 50 | 15 | 3 | - | 6 | - | 3 | 3 | 27 | 5 | 23 | - | - | - | 12 | 386 |
| Care in another home | 3,491 | 358 | 267 | 34 | 40 | 18 | 129 | 50 | 53 | 25 | 100 | 25 | 18 | - | - | - | 22 | 2,882 |
| By grandparent | 778 | 63 | 45 | - | 10 | 7 | 28 | - | 12 | 16 | 20 | 6 | 14 | - | - | - | 9 | 657 |
| By other relative | 476 | 43 | 33 | 3 | 4 | 3 | 25 | 10 | 12 | 3 | 14 | 5 | 10 | - | - | - | - | 394 |
| By nonrelative | 2,237 | 252 | 188 | 31 | 26 | 7 | 76 | 41 | 29 | 7 | 65 | 7 | 58 | - | - | - | 12 | 1,831 |
| Organized child care facilities | 2,451 | 253 | 144 | 21 | 18 | 70 | 251 | 110 | 36 | 105 | 44 | 29 | 15 | 5 | - | - | 16 | 1,881 |
| Day/group care center | 1,575 | 144 | 111 | 8 | 14 | 10 | 95 | 65 | 21 | 9 | 19 | 4 | 15 | - | - | - | - | 1,318 |
| Nursery/preschool | 875 | 110 | 33 | 13 | 4 | 59 | 156 | 45 | 15 | 96 | 25 | 25 | - | 5 | - | - | 16 | 564 |
| School-based activity | 15 | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 13 |
| Kindergarten/grade school | 121 | 17 | 7 | 6 | 5 | - | 20 | - | 15 | 4 | 14 | 14 | - | 5 | - | - | 6 | 59 |
| Child cares for self | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 |
| Mother cares for child at work[1] | 723 | 14 | 9 | 5 | - | - | 19 | 7 | - | 12 | 25 | - | 25 | - | - | - | - | 664 |
| **CHILDREN 5 to 14 YEARS** | | | | | | | | | | | | | | | | | | |
| Total | 20,804 | 2,900 | 1,143 | 421 | 874 | 462 | 2,379 | 800 | 226 | 1,353 | 714 | 661 | 53 | 335 | 468 | 972 | 328 | 12,706 |
| Care in child's home | 2,480 | 159 | 32 | 8 | 59 | 60 | 89 | 35 | 14 | 40 | 4 | 4 | - | 8 | 183 | 35 | - | 2,003 |
| By father | 1,473 | 99 | - | - | 48 | 51 | 65 | 25 | 8 | 31 | 4 | 4 | - | 4 | 112 | 35 | - | 1,155 |
| By grandparent | 232 | 22 | - | 8 | 10 | 5 | - | - | - | - | - | - | - | - | 22 | - | - | 188 |
| By other relative | 464 | 4 | 3 | - | 1 | - | 6 | 4 | - | 3 | - | - | - | - | 19 | - | - | 434 |
| By nonrelative | 311 | 33 | 29 | - | - | 4 | 18 | 6 | 6 | 6 | - | - | - | 4 | 30 | - | - | 226 |

See footnotes at end of table.

## Table 4. Children of Employed Mothers Using Secondary Child Care Arrangements, by Age of Child and Type of Primary Care Arrangement: Fall 1988—Continued

(In thousands)

| Age of child and type of primary arrangement | All children | Type of secondary arrangement | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Care in child's home by- | | | | | Care in another home by- | | | | Organized child care | | | School-based activity | Kindergarten/ grade school | Child cares for self | Mother cares for child[1] | No secondary care used |
| | | Total | Father | Grandparent | Other relative | Nonrelative | Total | Grandparent | Other relative | Nonrelative | Total | Day/ group care center | Nursery/ preschool | | | | | |
| Care in another home | 833 | 55 | 24 | 10 | 6 | 16 | 34 | 18 | 9 | 7 | 23 | 5 | 19 | 4 | 142 | - | 3 | 570 |
| By grandparent | 282 | 34 | 15 | 4 | 6 | 9 | 4 | - | 4 | - | 4 | - | 4 | 4 | 14 | - | - | 221 |
| By other relative | 147 | 3 | - | - | - | 3 | 6 | 6 | - | - | 3 | - | 3 | - | 15 | - | - | 120 |
| By nonrelative | 403 | 17 | 8 | 6 | - | 4 | 24 | 12 | 5 | 7 | 16 | 5 | 11 | - | 113 | - | 3 | 229 |
| Organized child care facilities | 526 | 58 | 37 | 6 | 10 | 5 | 50 | 22 | 6 | 22 | 19 | 12 | 7 | - | 70 | - | 3 | 326 |
| Day/group care center | 356 | 26 | 18 | - | 5 | 2 | 29 | 22 | 1 | 5 | 7 | - | 7 | - | 67 | - | - | 227 |
| Nursery/preschool | 170 | 32 | 19 | 6 | 4 | 3 | 21 | - | 5 | 16 | 12 | 12 | - | - | 3 | - | 3 | 99 |
| School-based activity | 346 | 26 | 9 | - | 9 | 8 | 15 | 4 | 3 | 8 | 12 | 12 | - | 4 | 9 | 11 | - | 269 |
| Kindergarten/grade school | 15,711 | 2,553 | 1,017 | 389 | 786 | 361 | 2,181 | 717 | 193 | 1,270 | 645 | 629 | 16 | 314 | 17 | 926 | 321 | 8,754 |
| Child cares for self | 476 | 16 | - | 4 | 5 | 7 | 4 | - | - | 4 | - | - | - | - | 6 | - | - | 450 |
| Mother cares for child at work[1] | 433 | 33 | 24 | 5 | - | 4 | 6 | 3 | - | 2 | 12 | - | 12 | 5 | 41 | - | - | 336 |

- Represents zero.

[1]Includes mothers working at home or away from home.

## Table 5. Loss of Time from Work by Employed Mothers Because of Failures in Child Care Arrangements and Frequency of Changes in Child Care Arrangements: Fall 1988

(Numbers in thousands. Data shown are limited to employed mothers)

| Characteristic | All-mothers | Mother with one child | Lost time from work in last month | | | | Change in arrangement in last 4 months | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | All mothers | | Mothers with one child | | All mothers | | Mothers with one child | |
| | | | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Total | 18,902 | 9,210 | 823 | 4.4 | 310 | 3.4 | 2,960 | 15.7 | 1,378 | 15.0 |
| Marital status: | | | | | | | | | | |
| Married, spouse present | 14,262 | 6,288 | 618 | 4.3 | 227 | 3.6 | 2,255 | 15.8 | 945 | 15.0 |
| All other marital statuses[1] | 4,640 | 2,921 | 205 | 4.4 | 83 | 2.8 | 705 | 15.2 | 433 | 14.8 |
| Age of youngest child: | | | | | | | | | | |
| Under 1 year | 1,456 | 650 | 87 | 6.0 | 38 | 5.9 | 244 | 16.8 | 92 | 14.2 |
| 1 and 2 years | 3,759 | 1,654 | 285 | 7.6 | 88 | 5.3 | 608 | 16.2 | 238 | 14.4 |
| 3 and 4 years | 2,889 | 1,169 | 113 | 3.9 | 45 | 3.9 | 482 | 16.7 | 191 | 16.3 |
| 5 to 11 years | 7,935 | 3,219 | 302 | 3.8 | 102 | 3.2 | 1,391 | 17.5 | 639 | 19.9 |
| 12 to 14 years | 2,864 | 2,517 | 36 | 1.3 | 36 | 1.4 | 235 | 8.2 | 217 | 8.6 |
| Employment status: | | | | | | | | | | |
| Full time | 12,551 | 6,440 | 568 | 4.5 | 244 | 3.8 | 2,019 | 16.1 | 980 | 15.2 |
| Part time | 6,350 | 2,770 | 255 | 4.0 | 66 | 2.4 | 941 | 14.8 | 398 | 14.4 |
| Type of shift: | | | | | | | | | | |
| Day shift | 12,009 | 6,040 | 553 | 4.6 | 219 | 3.6 | 2,072 | 17.3 | 969 | 16.0 |
| Not a day shift | 6,892 | 3,169 | 270 | 3.9 | 91 | 2.9 | 888 | 12.9 | 409 | 12.9 |
| Place of primary care: | | | | | | | | | | |
| Care in child's home | (X) | 1,332 | (X) | (X) | 32 | 2.4 | (X) | (X) | 91 | 6.8 |
| By father | (X) | 559 | (X) | (X) | 14 | 2.4 | (X) | (X) | 52 | 9.3 |
| By grandparent | (X) | 337 | (X) | (X) | 10 | 2.9 | (X) | (X) | 21 | 6.2 |
| By other relative | (X) | 278 | (X) | (X) | 8 | 2.9 | (X) | (X) | 18 | 6.6 |
| By nonrelative | (X) | 157 | (X) | (X) | (B) | (B) | (X) | (X) | (B) | (B) |
| Care in another home | (X) | 1,750 | (X) | (X) | 81 | 4.6 | (X) | (X) | 317 | 18.1 |
| By grandparent | (X) | 467 | (X) | (X) | 8 | 1.8 | (X) | (X) | 37 | 7.8 |
| By other relative | (X) | 332 | (X) | (X) | 20 | 6.0 | (X) | (X) | 47 | 14.2 |
| By nonrelative | (X) | 951 | (X) | (X) | 53 | 5.5 | (X) | (X) | 233 | 24.5 |
| Organized child care facilities | (X) | 1,152 | (X) | (X) | 59 | 5.1 | (X) | (X) | 186 | 16.1 |
| Day/group care center | (X) | 817 | (X) | (X) | 37 | 4.5 | (X) | (X) | 110 | 13.4 |
| Nursery school/preschool | (X) | 335 | (X) | (X) | 22 | 6.6 | (X) | (X) | 76 | 22.7 |
| School-based activity | (X) | 81 | (X) | (X) | (B) | (B) | (X) | (X) | (B) | (B) |
| Kindergarten/grade school | (X) | 4,409 | (X) | (X) | 130 | 3.0 | (X) | (X) | 709 | 16.1 |
| Child cares for self | (X) | 229 | (X) | (X) | - | - | (X) | (X) | 2 | 0.9 |
| Mother cares for child at work[2] | (X) | 258 | (X) | (X) | 8 | 3.2 | (X) | (X) | 17 | 6.7 |

(X) Not applicable. -Represents zero. (B) Base less than 200,000.

[1]Includes married, husband absent (including separated), widowed, divorced, and never-married mothers.
[2]Includes mothers working at home or away from home.

## Table 6. Weekly Child Care Costs Paid by Families: Fall 1988

(Numbers of parents in thousands. Excludes persons with no report of family income in last 4 months)

| Characteristic | Number | No payments made | Payments made | | Weekly child care expenses | | Hours worked per week | | Monthly family income | | Income spent on child care per month | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Number | Percent | Mean[1] | Standard error | Mean[2] | Standard error | Mean[3] | Standard error | Percent[4] | Standard error |
| **ALL PARENTS** | | | | | | | | | | | | |
| Total | 21,108 | 13,009 | 8,099 | 38.4 | $53.4 | 1.17 | 36.1 | 0.34 | $3,371 | 92 | 6.9 | 0.2 |
| Employed mothers | 18,843 | 11,323 | 7,520 | 39.9 | 54.0 | 1.23 | 36.7 | 0.32 | 3,460 | 95 | 6.8 | 0.2 |
| Unemployed mothers | 740 | 658 | 82 | 11.1 | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) |
| Mothers enrolled in school | 794 | 547 | 246 | 31.0 | 40.0 | 5.16 | 20.6 | 2.14 | 2,139 | 306 | 8.1 | 1.2 |
| All fathers | 732 | 481 | 251 | 34.2 | 52.7 | 6.64 | 43.7 | 1.87 | 2,525 | 352 | 9.0 | 1.3 |
| **EMPLOYED MOTHERS** | | | | | | | | | | | | |
| Race: | | | | | | | | | | | | |
| White | 15,497 | 9,216 | 6,281 | 40.5 | $54.8 | 1.32 | 36.2 | 0.35 | $3,578 | 107 | 6.6 | 0.2 |
| Black | 2,677 | 1,631 | 1,046 | 39.1 | 47.6 | 3.13 | 38.5 | 0.85 | 2,616 | 157 | 7.9 | 0.5 |
| Hispanic origin: | | | | | | | | | | | | |
| Hispanic | 1,428 | 797 | 631 | 44.2 | 50.9 | 4.90 | 36.8 | 1.02 | 2,668 | 192 | 8.3 | 0.6 |
| Not Hispanic | 17,415 | 10,526 | 6,889 | 39.6 | 54.3 | 1.26 | 36.6 | 0.34 | 3,532 | 102 | 6.7 | 0.2 |
| Marital status: | | | | | | | | | | | | |
| Married, spouse present | 14,237 | 8,520 | 5,718 | 40.2 | 56.3 | 1.44 | 36.0 | 0.37 | 3,918 | 116 | 6.2 | 0.2 |
| All other marital statuses[5] | 4,605 | 2,803 | 1,802 | 39.1 | 46.7 | 2.14 | 36.7 | 0.58 | 2,005 | 104 | 10.1 | 0.5 |
| Age of youngest child: | | | | | | | | | | | | |
| Under 5 years | 8,083 | 2,563 | 5,520 | 68.3 | 59.2 | 1.47 | 35.9 | 0.37 | 3,497 | 110 | 7.3 | 0.2 |
| Less than 1 year | 1,452 | 491 | 961 | 66.2 | 65.3 | 4.14 | 36.0 | 0.92 | 3,292 | 212 | 8.6 | 0.6 |
| 1 and 2 years | 3,754 | 1,231 | 2,523 | 67.2 | 61.1 | 2.32 | 35.8 | 0.53 | 3,548 | 152 | 7.5 | 0.3 |
| 3 and 4 years | 2,877 | 842 | 2,035 | 70.7 | 54.0 | 1.96 | 36.0 | 0.67 | 3,531 | 206 | 6.6 | 0.4 |
| 5 to 14 years | 10,760 | 8,760 | 2,000 | 18.6 | 39.7 | 1.91 | 38.8 | 0.61 | 3,357 | 197 | 5.1 | 0.3 |
| Number of children: | | | | | | | | | | | | |
| One child | 9,185 | 5,825 | 3,360 | 36.6 | 46.8 | 1.30 | 37.7 | 0.46 | 3,351 | 107 | 6.1 | 0.2 |
| Two children | 6,941 | 4,014 | 2,927 | 42.2 | 60.8 | 2.21 | 36.1 | 0.53 | 3,612 | 183 | 7.3 | 0.4 |
| Three or more children | 2,717 | 1,484 | 1,233 | 45.4 | 57.7 | 3.62 | 35.1 | 0.85 | 3,396 | 250 | 7.4 | 0.5 |
| Educational attainment: | | | | | | | | | | | | |
| Less than high school | 2,252 | 1,576 | 676 | 30.0 | 41.8 | 3.55 | 36.9 | 0.84 | 2,152 | 147 | 8.4 | 0.6 |
| High school | 8,146 | 5,180 | 2,966 | 36.4 | 47.9 | 1.52 | 36.9 | 0.48 | 2,873 | 120 | 7.2 | 0.3 |
| College, 1 to 3 years | 4,600 | 2,580 | 2,020 | 43.9 | 53.0 | 2.08 | 36.2 | 0.67 | 3,260 | 114 | 7.0 | 0.3 |
| College, 4 or more years | 3,845 | 1,986 | 1,859 | 48.3 | 69.4 | 3.24 | 36.4 | 0.72 | 5,088 | 284 | 5.9 | 0.3 |
| Employment status: | | | | | | | | | | | | |
| Full time | 12,518 | 6,919 | 5,599 | 44.7 | 57.4 | 1.44 | 41.5 | 0.21 | 3,449 | 101 | 7.2 | 0.2 |
| Part time | 6,324 | 4,404 | 1,921 | 30.4 | 44.2 | 2.17 | 22.4 | 0.49 | 3,490 | 235 | 5.5 | 0.4 |
| Occupation:[6] | | | | | | | | | | | | |
| Managerial-professional | 4,736 | 2,554 | 2,182 | 46.1 | 65.9 | 2.92 | 37.3 | 0.62 | 4,331 | 168 | 6.6 | 0.3 |
| Technical, sales, and administrative support | 8,054 | 4,720 | 3,334 | 41.4 | 52.3 | 1.48 | 36.8 | 0.46 | 3,404 | 172 | 6.7 | 0.3 |
| Service occupations | 3,436 | 2,444 | 992 | 28.9 | 40.0 | 2.40 | 33.1 | 1.02 | 2,450 | 132 | 7.1 | 0.4 |
| Farming, forestry, and fishing | 184 | 141 | 43 | 23.4 | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) |
| Precision production, craft, and repair | 424 | 271 | 153 | 36.1 | (B) | (B) | (B) | (B) | (B) | (B) | (B) | (B) |
| Operators, fabricators, and laborers | 1,965 | 1,188 | 777 | 39.6 | 46.5 | 3.06 | 38.6 | 0.85 | 2,720 | 156 | 7.4 | 0.4 |
| Monthly family income: | | | | | | | | | | | | |
| Less than $1,500 | 3,395 | 2,258 | 1,136 | 33.5 | 41.8 | 2.66 | 35.1 | 0.80 | 990 | 28 | 18.3 | 0.5 |
| $1,500 to $2,999 | 6,688 | 4,033 | 2,654 | 39.7 | 46.3 | 1.52 | 36.5 | 0.55 | 2,297 | 23 | 8.7 | 0.1 |
| $3,000 to $4,499 | 5,044 | 2,868 | 2,175 | 43.1 | 54.6 | 1.95 | 37.4 | 0.62 | 3,698 | 25 | 6.4 | 0.1 |
| $4,500 and over | 3,716 | 2,162 | 1,554 | 41.8 | 75.4 | 3.68 | 37.1 | 0.68 | 6,919 | 348 | 4.7 | 0.2 |

See footnotes at end of table.

## Table 6. Weekly Child Care Costs Paid by Families: Fall 1988—Continued

(Numbers of parents in thousands. Excludes persons with no report of family income in last 4 months)

| Characteristic | Number | No payments made | Payments made | | Weekly child care expenses | | Hours worked per week | | Monthly family income | | Income spent on child care per month | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Number | Percent | Mean[1] | Standard error | Mean[2] | Standard error | Mean[3] | Standard error | Percent[4] | Standard error |
| Poverty level: | | | | | | | | | | | | |
| Below poverty level | 1,581 | 1,106 | 474 | 30.0 | 42.2 | 4.91 | 32.7 | 1.19 | 879 | 88 | 20.8 | 2.1 |
| Above poverty level | 17,262 | 10,216 | 7,046 | 40.8 | 54.8 | 1.26 | 36.9 | 0.34 | 3,633 | 99 | 6.5 | 0.2 |
| Region of residence: | | | | | | | | | | | | |
| Northeast | 3,366 | 2,178 | 1,186 | 35.3 | 63.8 | 4.32 | 35.3 | 0.84 | 3,651 | 199 | 7.6 | 0.4 |
| Midwest | 5,020 | 2,963 | 2,057 | 41.0 | 50.6 | 1.97 | 35.9 | 0.59 | 3,463 | 215 | 6.3 | 0.4 |
| South | 6,725 | 4,062 | 2,663 | 39.6 | 49.8 | 1.75 | 37.7 | 0.53 | 3,274 | 134 | 6.6 | 0.3 |
| West | 3,731 | 2,119 | 1,612 | 43.2 | 58.1 | 2.71 | 36.9 | 0.75 | 3,620 | 228 | 7.0 | 0.4 |
| Metropolitan residence: | | | | | | | | | | | | |
| Metropolitan | 14,177 | 8,451 | 5,726 | 40.4 | 57.2 | 1.50 | 36.7 | 0.37 | 3,592 | 103 | 6.9 | 0.2 |
| Central cities | 5,355 | 3,094 | 2,261 | 42.2 | 56.0 | 2.50 | 36.3 | 0.52 | 3,300 | 148 | 7.4 | 0.3 |
| Outside central cities | 8,822 | 5,358 | 3,465 | 39.3 | 57.9 | 1.86 | 36.3 | 0.52 | 3,783 | 139 | 6.6 | 0.2 |
| Non-metropolitan | 4,665 | 2,871 | 1,794 | 38.5 | 44.0 | 1.84 | 36.4 | 0.66 | 3,038 | 227 | 6.3 | 0.5 |

B Base less than 200,000.

[1] Mean expenditures per week among persons making child care payments.

[2] Mean number of hours usually worked per week in last 4 months among persons making child care payments. For persons enrolled in school or unemployed, hours per week represents time spent in these activities.

[3] Mean monthly income for last 4 months among persons making child care payments.

[4] Percent is ratio of average monthly child care payments (prorated from weekly averages) to the average monthly family income for each of the categories shown in the table.

[5] Includes married, husband absent (including separated), widowed, divorced and never-married women.

[6] Excludes persons in the Armed Forces.

## Table 7. Number of Child Care Arrangements Made by Employed Mothers, by Payment Status of Arrangement: Fall 1988

(Numbers in thousands)

| Age of child and type of arrangement | Number of arrangements | No payments made | Payments made | | Type of payment | |
|---|---|---|---|---|---|---|
| | | | Number | Percent | Separate | Shared |
| **ARRANGEMENTS FOR ALL CHILDREN** | | | | | | |
| Total | 41,632 | 30,566 | 11,066 | 26.6 | 6,710 | 4,357 |
| Care in child's home | 9,232 | 7,507 | 1,725 | 18.7 | 620 | 1,106 |
| By child's family[1] | 5,779 | 5,779 | (X) | (X) | (X) | (X) |
| By grandparent | 1,371 | 1,103 | 266 | 19.6 | 100 | 169 |
| By other relative | 567 | 363 | 204 | 36.0 | 71 | 133 |
| By nonrelative | 1,515 | 262 | 1,253 | 82.7 | 449 | 804 |
| Care in another home | 7,650 | 2,487 | 5,162 | 67.5 | 2,937 | 2,225 |
| By child's family[1] | 221 | 221 | (X) | (X) | (X) | (X) |
| By grandparent | 2,193 | 1,528 | 665 | 30.3 | 330 | 335 |
| By other relative | 855 | 361 | 494 | 57.8 | 359 | 135 |
| By nonrelative | 4,381 | 377 | 4,003 | 91.4 | 2,248 | 1,755 |
| Organized child care facilities | 4,097 | 282 | 3,815 | 93.1 | 2,870 | 944 |
| Day/group care | 2,791 | 129 | 2,662 | 95.4 | 1,862 | 799 |
| Nursery/preschool | 1,306 | 153 | 1,153 | 88.3 | 1,008 | 145 |
| School-based activity | 737 | 375 | 363 | 49.2 | 282 | 81 |
| Kindergarten/grade school | 16,846 | 16,846 | (X) | (X) | (X) | (X) |
| Child cares for self | 1,495 | 1,495 | (X) | (X) | (X) | (X) |
| Mother cares for child at work[2] | 1,573 | 1,573 | (X) | (X) | (X) | (X) |
| **ARRANGEMENTS FOR CHILDREN UNDER 5 YEARS** | | | | | | |
| Total | 11,794 | 4,892 | 6,902 | 58.5 | 4,559 | 2,342 |
| Care in child's home | 3,709 | 2,784 | 926 | 25.0 | 387 | 539 |
| By child's family[1] | 2,074 | 2,074 | (X) | (X) | (X) | (X) |
| By grandparent | 697 | 533 | 165 | 23.6 | 67 | 98 |
| By other relative | 226 | 118 | 106 | 47.8 | 62 | 46 |
| By nonrelative | 712 | 59 | 653 | 91.7 | 258 | 395 |
| Care in another home | 4,315 | 1,006 | 3,309 | 76.7 | 2,094 | 1,215 |
| By child's family[1] | 97 | 97 | (X) | (X) | (X) | (X) |
| By grandparent | 1,075 | 663 | 412 | 38.3 | 224 | 188 |
| By other relative | 588 | 181 | 407 | 69.3 | 308 | 99 |
| By nonrelative | 2,555 | 65 | 2,490 | 97.5 | 1,562 | 928 |
| Organized child care facilities | 2,830 | 181 | 2,650 | 93.6 | 2,072 | 578 |
| Day/group care | 1,738 | 50 | 1,689 | 97.1 | 1,240 | 449 |
| Nursery/preschool | 1,092 | 131 | 961 | 88.0 | 832 | 129 |
| School-based activity | 25 | 8 | 18 | (B) | 8 | 10 |
| Kindergarten/grade school | 123 | 123 | (X) | (X) | (X) | (X) |
| Child cares for self | 4 | 4 | (X) | (X) | (X) | (X) |
| Mother cares for child at work[2] | 788 | 788 | (X) | (X) | (X) | (X) |
| **ARRANGEMENTS FOR CHILDREN 5 TO 14 YEARS** | | | | | | |
| Total | 29,838 | 25,674 | 4,164 | 14.0 | 2,150 | 2,014 |
| Care in child's home | 5,524 | 4,723 | 800 | 14.5 | 233 | 567 |
| By child's family[1] | 3,706 | 3,706 | (X) | (X) | (X) | (X) |
| By grandparent | 674 | 570 | 104 | 15.4 | 33 | 71 |
| By other relative | 341 | 244 | 96 | 28.2 | 9 | 87 |
| By nonrelative | 803 | 203 | 600 | 74.7 | 191 | 409 |
| Care in another home | 3,335 | 1,482 | 1,853 | 55.6 | 844 | 1,010 |
| By child's family[1] | 124 | 124 | (X) | (X) | (X) | (X) |
| By grandparent | 1,118 | 865 | 253 | 22.7 | 107 | 147 |
| By other relative | 267 | 180 | 87 | 32.5 | 51 | 36 |
| By nonrelative | 1,826 | 313 | 1,513 | 82.9 | 686 | 827 |
| Organized child care facilities | 1,267 | 101 | 1,166 | 92.0 | 798 | 367 |
| Day/group care | 1,053 | 80 | 973 | 92.4 | 622 | 351 |
| Nursery/preschool | 214 | 21 | 193 | 90.0 | 176 | 16 |
| School-based activity | 712 | 367 | 345 | 48.5 | 274 | 71 |
| Kindergarten/grade school | 16,723 | 16,723 | (X) | (X) | (X) | (X) |
| Child cares for self | 1,492 | 1,492 | (X) | (X) | (X) | (X) |
| Mother cares for child at work[2] | 785 | 785 | (X) | (X) | (X) | (X) |

X Not applicable.

[1]Includes child's father, brother, and sister.

[2]Includes women working at home or away from home.

Table 8. **Weekly Child Care Costs of Employed Mothers When Payments are Made Separately for Each Child: Fall 1988**

(Numbers in thousands. Limited to arrangements using 10 or more hours per week)

| Age of child and type of arrangement | Number of arrangements | Weekly hours per arrangement | | Weekly cost per arrangement | | Hourly cost per arrangement | |
|---|---|---|---|---|---|---|---|
| | | Mean | Standard error | Mean | Standard error | Mean[1] | Standard error |
| **ARRANGEMENTS FOR ALL CHILDREN** | | | | | | | |
| Total | 4,995 | 30.3 | 0.52 | $45.8 | $1.02 | $1.78 | $0.05 |
| By relative[2] | 683 | 30.9 | 1.43 | 36.6 | 2.22 | 1.38 | 0.09 |
| Grandparent | 347 | 29.8 | 2.15 | 34.0 | 2.77 | 1.42 | 0.15 |
| Other relative | 336 | 32.1 | 1.87 | 39.4 | 3.46 | 1.34 | 0.12 |
| By nonrelative | 2,069 | 29.9 | 0.79 | 45.5 | 1.57 | 1.76 | 0.08 |
| In child's home | 276 | 26.6 | 2.30 | 56.9 | 6.58 | 2.61 | 0.39 |
| In another home | 1,793 | 30.4 | 0.84 | 43.7 | 1.48 | 1.63 | 0.06 |
| Organized child care facilities | 2,098 | 31.5 | 0.79 | 50.3 | 1.63 | 1.91 | 0.09 |
| Day/group care center | 1,416 | 32.0 | 0.95 | 49.2 | 1.90 | 1.85 | 0.12 |
| Nursery/preschool | 683 | 30.5 | 1.35 | 52.6 | 3.03 | 2.02 | 0.14 |
| School-based activity | 144 | (B) | (B) | (B) | (B) | (B) | (B) |
| **ARRANGEMENTS FOR CHILDREN UNDER 5 YEARS** | | | | | | | |
| Total | 3,691 | 33.7 | 0.55 | $49.7 | $1.23 | $1.71 | $0.06 |
| By relative[2] | 559 | 33.8 | 1.50 | 37.9 | 2.50 | 1.26 | 0.09 |
| Grandparent | 253 | 34.7 | 2.32 | 35.0 | 3.15 | 1.19 | 0.15 |
| Other relative | 306 | 33.1 | 1.96 | 40.3 | 3.77 | 1.32 | 0.12 |
| By nonrelative | 1,549 | 33.6 | 0.83 | 50.7 | 1.04 | 1.75 | 0.10 |
| In child's home | 176 | (B) | (B) | (B) | (B) | (B) | (B) |
| In another home | 1,374 | 34.1 | 0.84 | 48.4 | 1.68 | 1.59 | 0.08 |
| Organized child care facilities | 1,574 | 33.9 | 0.88 | 53.0 | 1.96 | 1.83 | 0.10 |
| Day/group care center | 1,000 | 36.0 | 1.01 | 52.6 | 2.33 | 1.70 | 0.13 |
| Nursery/preschool | 574 | 30.4 | 1.55 | 53.6 | 3.56 | 2.07 | 0.15 |
| School-based activity | 8 | (B) | (B) | (B) | (B) | (B) | (B) |
| **ARRANGEMENTS FOR CHILDREN 5 TO 14 YEARS** | | | | | | | |
| Total | 1,304 | 20.7 | 0.86 | $34.9 | $1.51 | $1.98 | $0.10 |
| By relative[2] | 124 | (B) | (B) | (B) | (B) | (B) | (B) |
| Grandparent | 94 | (B) | (B) | (B) | (B) | (B) | (B) |
| Other relative | 31 | (B) | (B) | (B) | (B) | (B) | (B) |
| By nonrelative | 520 | 19.1 | 1.30 | 29.9 | 2.09 | 1.81 | 0.12 |
| In child's home | 100 | (B) | (B) | (B) | (B) | (B) | (B) |
| In another home | 420 | 18.4 | 1.41 | 28.4 | 2.22 | 1.77 | 0.13 |
| Organized child care facilities | 524 | 24.4 | 1.44 | 42.2 | 2.52 | 2.12 | 0.19 |
| Day/group care center | 415 | 22.5 | 1.63 | 40.9 | 2.99 | 2.22 | 0.22 |
| Nursery/preschool | 109 | (B) | (B) | (B) | (B) | (B) | (B) |
| School-based activity | 136 | (B) | (B) | (B) | (B) | (B) | (B) |

B Base less than 200,000.

[1]Average of individual costs per hour for each arrangement.
[2]Includes care provided in child's home or another home.

## Table 9. Weekly Child Care Costs of Employed Mothers When Payments Are Shared Among Different Children: Fall 1988

(Numbers in thousands. Limited to arrangement groups using 10 or more hours per week)

| Age of youngest child and type of arrangement | Number of arrangement groups | Weekly hours per arrangement group | | Weekly cost per arrangement group | | Hourly cost per arrangement group | |
|---|---|---|---|---|---|---|---|
| | | Mean[1] | Standard error | Mean | Standard error | Mean[2] | Standard error |
| **ARRANGEMENTS FOR ALL CHILDREN** | | | | | | | |
| Total | 1,861 | 49.3 | 1.74 | $61.6 | $2.53 | $1.70 | $0.10 |
| By relative | 330 | 55.2 | 3.91 | 41.1 | 3.56 | 0.99 | 0.13 |
| Grandparent | 216 | 55.5 | 4.81 | 44.4 | 4.85 | 1.06 | 0.17 |
| Other relative | 114 | (B) | (B) | (B) | (B) | (B) | (B) |
| By nonrelative | 1,095 | 46.1 | 2.17 | 62.3 | 3.47 | 1.78 | 0.14 |
| In child's home | 337 | 40.1 | 3.90 | 75.8 | 8.63 | 2.35 | 0.31 |
| In another home | 757 | 48.8 | 2.57 | 56.2 | 3.04 | 1.52 | 0.14 |
| Organized child care facilities | 405 | 54.1 | 4.30 | 72.8 | 4.88 | 1.95 | 0.23 |
| Day/group care centers | 354 | 54.6 | 4.55 | 73.7 | 5.35 | 1.95 | 0.26 |
| Nursery/preschool | 52 | (B) | (B) | (B) | (B) | (B) | (B) |
| School-based activity | 30 | (B) | (B) | (B) | (B) | (B) | (B) |
| **YOUNGEST CHILD IN ARRANGEMENT UNDER 5 YEARS** | | | | | | | |
| Total | 1,371 | 55.3 | 2.00 | $67.5 | $3.07 | $1.71 | $0.13 |
| By relative | 262 | 59.0 | 4.21 | 43.0 | 4.31 | 0.93 | 0.14 |
| Grandparent | 177 | (B) | (B) | (B) | (B) | (B) | (B) |
| Other relative | 85 | (B) | (B) | (B) | (B) | (B) | (B) |
| By nonrelative | 758 | 52.2 | 2.54 | 71.2 | 4.41 | 1.89 | 0.19 |
| In child's home | 208 | 46.3 | 5.12 | 94.3 | 12.20 | 2.69 | 0.46 |
| In another home | 550 | 54.5 | 2.90 | 62.4 | 3.55 | 1.59 | 0.19 |
| Organized child care facilities | 346 | 59.3 | 4.67 | 76.8 | 5.46 | 1.86 | 0.26 |
| Day/group care centers | 294 | 60.8 | 4.97 | 78.6 | 6.10 | 1.84 | 0.26 |
| Nursery/preschool | 52 | (B) | (B) | (B) | (B) | (B) | (B) |
| School-based activity | 5 | (B) | (B) | (B) | (B) | (B) | (B) |
| **YOUNGEST CHILD IN ARRANGEMENT 5 TO 14 YEARS** | | | | | | | |
| Total | 490 | 32.7 | 2.63 | $45.1 | $3.53 | $1.67 | $0.13 |
| By relative | 69 | (B) | (B) | (B) | (B) | (B) | (B) |
| Grandparent | 39 | (B) | (B) | (B) | (B) | (B) | (B) |
| Other relative | 29 | (B) | (B) | (B) | (B) | (B) | (B) |
| By nonrelative | 336 | 32.5 | 3.29 | 42.2 | 3.74 | 1.51 | 0.13 |
| In child's home | 129 | (B) | (B) | (B) | (B) | (B) | (B) |
| In another home | 207 | 33.9 | 4.26 | 39.8 | 4.58 | 1.34 | 0.12 |
| Organized child care facilities | 60 | (B) | (B) | (B) | (B) | (B) | (B) |
| Day/group care centers | 60 | (B) | (B) | (B) | (B) | (B) | (B) |
| Nursery/preschool | - | (B) | (B) | (B) | (B) | (B) | (B) |
| School-based activity | 26 | (B) | (B) | (B) | (B) | (B) | (B) |

B Base less than 200,000.

[1] Represents the sum of the number of hours used by the individual children in this arrangement.

[2] Average costs per hour per child for each shared arrangement.

## Table 10. Primary Child Care Arrangements Used by Employed Mothers, by Type of Work Shift of Principal Job: Fall 1988

(In thousands)

| Employment status and type of arrangement | Number of children | Type of shift | | Age of child and type of shift | | | |
|---|---|---|---|---|---|---|---|
| | | | | Under 5 years | | 5 to 14 years | |
| | | Day shift | Not a day shift | Day shift | Not a day shift | Day shift | Not a day shift |
| **ALL MOTHERS** | | | | | | | |
| Total | 30,287 | 19,008 | 11,279 | 5,864 | 3,619 | 13,143 | 7,660 |
| Care in child's home | 5,158 | 1,927 | 3,231 | 1,206 | 1,472 | 721 | 1,759 |
| By father | 2,906 | 775 | 2,131 | 483 | 950 | 292 | 1,181 |
| By grandparent | 770 | 427 | 343 | 303 | 236 | 124 | 107 |
| By other relative | 671 | 295 | 376 | 112 | 95 | 183 | 281 |
| By nonrelative | 811 | 430 | 381 | 308 | 191 | 121 | 190 |
| Care in another home | 4,323 | 2,844 | 1,480 | 2,406 | 1,084 | 437 | 395 |
| By grandparent | 1,060 | 673 | 388 | 532 | 246 | 141 | 142 |
| By other relative | 623 | 328 | 295 | 263 | 213 | 65 | 82 |
| By nonrelative | 2,640 | 1,843 | 797 | 1,611 | 625 | 232 | 172 |
| Organized child care facilities | 2,977 | 2,170 | 807 | 1,778 | 673 | 392 | 134 |
| Day/group care center | 1,931 | 1,432 | 499 | 1,159 | 417 | 274 | 82 |
| Nursery/preschool | 1,045 | 737 | 308 | 619 | 256 | 118 | 52 |
| School-based activity | 361 | 259 | 102 | 13 | 2 | 247 | 99 |
| Kindergarten/grade school | 15,832 | 10,959 | 4,873 | 89 | 32 | 10,870 | 4,841 |
| Child cares for self | 481 | 295 | 186 | 5 | - | 290 | 186 |
| Mother cares for child at work[1] | 1,155 | 554 | 601 | 367 | 355 | 187 | 246 |
| **MOTHERS EMPLOYED FULL TIME** | | | | | | | |
| Total | 19,825 | 14,914 | 4,910 | 4,606 | 1,495 | 10,308 | 3,415 |
| Care in child's home | 2,712 | 1,367 | 1,346 | 828 | 472 | 538 | 873 |
| By father | 1,253 | 451 | 802 | 268 | 268 | 182 | 534 |
| By grandparent | 538 | 366 | 172 | 248 | 105 | 118 | 66 |
| By other relative | 442 | 248 | 195 | 90 | 30 | 157 | 164 |
| By nonrelative | 479 | 302 | 177 | 221 | 69 | 81 | 108 |
| Care in another home | 3,180 | 2,332 | 848 | 1,959 | 615 | 373 | 234 |
| By grandparent | 776 | 542 | 235 | 432 | 144 | 109 | 90 |
| By other relative | 422 | 253 | 169 | 212 | 109 | 40 | 60 |
| By nonrelative | 1,982 | 1,536 | 445 | 1,314 | 361 | 223 | 83 |
| Organized child care facilities | 2,176 | 1,801 | 376 | 1,475 | 317 | 325 | 59 |
| Day/group care center | 1,443 | 1,207 | 236 | 982 | 197 | 225 | 39 |
| Nursery/preschool | 733 | 593 | 140 | 493 | 120 | 100 | 20 |
| School-based activity | 249 | 212 | 36 | 3 | 2 | 209 | 34 |
| Kindergarten/grade school | 10,716 | 8,627 | 2,088 | 85 | 6 | 8,542 | 2,082 |
| Child cares for self | 312 | 241 | 71 | 5 | - | 235 | 71 |
| Mother cares for child at work[1] | 480 | 335 | 145 | 249 | 84 | 86 | 62 |
| **MOTHERS EMPLOYED PART TIME** | | | | | | | |
| Total | 10,462 | 4,094 | 6,369 | 1,259 | 2,124 | 2,835 | 4,245 |
| Care in child's home | 2,446 | 561 | 1,885 | 378 | 1,000 | 183 | 885 |
| By father | 1,653 | 324 | 1,329 | 214 | 682 | 110 | 647 |
| By grandparent | 232 | 61 | 171 | 55 | 130 | 6 | 41 |
| By other relative | 229 | 48 | 181 | 22 | 65 | 26 | 116 |
| By nonrelative | 332 | 127 | 204 | 87 | 123 | 41 | 82 |
| Care in another home | 1,143 | 512 | 631 | 448 | 470 | 64 | 161 |
| By grandparent | 284 | 131 | 153 | 100 | 102 | 31 | 51 |
| By other relative | 201 | 75 | 126 | 51 | 104 | 24 | 22 |
| By nonrelative | 658 | 305 | 352 | 297 | 264 | 8 | 88 |
| Organized child care facilities | 800 | 369 | 432 | 302 | 357 | 67 | 75 |
| Day/group care center | 488 | 225 | 263 | 177 | 220 | 48 | 43 |
| Nursery/preschool | 312 | 144 | 168 | 125 | 137 | 19 | 32 |
| School-based activity | 112 | 47 | 65 | 9 | - | 38 | 65 |
| Kindergarten/grade school | 5,116 | 2,332 | 2,785 | 4 | 26 | 2,328 | 2,759 |
| Child cares for self | 169 | 54 | 115 | - | - | 54 | 115 |
| Mother cares for child at work[1] | 675 | 219 | 456 | 118 | 272 | 101 | 184 |

- Represents zero.

[1]Includes women working at home or away from home.

## Table 11. Primary Child Care Arrangements Used by Dual-Employed Parents: Fall 1988

(In thousands. Limited to children of married couples where both parents are employed)

| Work status of mother's principal job and type of arrangement | Total (1) | Children under 5 years | | | | Children 5 to 14 years | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Mother works day shift | | Mother works non-day shift | | Mother works day shift | | Mother works non-day shift | |
| | | Father works day shift (2) | Father works Non-day shift (3) | Father works day shift (4) | Father works Non-day shift (5) | Father works day shift (6) | Father works Non-day shift (7) | Father works day shift (8) | Father works Non-day shift (9) |
| **ALL MOTHERS** | | | | | | | | | |
| Total | 22,935 | 3,443 | 1,288 | 2,040 | 816 | 7,477 | 2,124 | 4,105 | 1,643 |
| Care in child's home | 3,927 | 536 | 367 | 805 | 357 | 327 | 174 | 963 | 397 |
| By father | 2,611 | 147 | 236 | 644 | 250 | 113 | 113 | 809 | 298 |
| By grandparent | 368 | 121 | 49 | 52 | 53 | 43 | 30 | 15 | 6 |
| By other relative | 350 | 44 | 17 | 10 | 10 | 80 | 20 | 97 | 72 |
| By nonrelative | 598 | 224 | 66 | 99 | 44 | 90 | 12 | 42 | 22 |
| Care in another home | 3,283 | 1,476 | 489 | 570 | 249 | 283 | 40 | 111 | 65 |
| By grandparent | 787 | 318 | 117 | 129 | 55 | 79 | 13 | 52 | 25 |
| By other relative | 383 | 133 | 58 | 104 | 33 | 35 | 5 | 3 | 11 |
| By nonrelative | 2,114 | 1,024 | 314 | 338 | 162 | 170 | 22 | 56 | 28 |
| Organized child care facilities | 2,307 | 1,100 | 335 | 419 | 96 | 210 | 53 | 75 | 20 |
| Day/group care center | 1,439 | 691 | 219 | 257 | 51 | 141 | 25 | 36 | 20 |
| Nursery/preschool | 868 | 409 | 117 | 162 | 44 | 69 | 28 | 39 | - |
| School based activity | 238 | 9 | 3 | 2 | - | 123 | 22 | 49 | 30 |
| Kindergarten/grade school | 11,782 | 32 | 33 | 12 | 4 | 6,240 | 1,768 | 2,709 | 984 |
| Child cares for self | 298 | 5 | - | - | - | 130 | 51 | 59 | 52 |
| Mother cares for child at work[1] | 1,100 | 285 | 60 | 231 | 110 | 164 | 16 | 139 | 95 |
| **MOTHERS EMPLOYED FULL TIME** | | | | | | | | | |
| Total | 14,222 | 2,688 | 972 | 805 | 288 | 5,855 | 1,805 | 1,470 | 738 |
| Care in child's home | 1,858 | 842 | 246 | 233 | 94 | 218 | 113 | 394 | 218 |
| By father | 1,055 | 70 | 138 | 185 | 56 | 51 | 74 | 325 | 156 |
| By grandparent | 252 | 93 | 41 | 13 | 22 | 43 | 23 | 10 | 6 |
| By other relative | 217 | 26 | 12 | 3 | - | 67 | 11 | 46 | 51 |
| By nonrelative | 335 | 152 | 55 | 32 | 16 | 57 | 4 | 14 | 4 |
| Care in another home | 2,414 | 1,222 | 389 | 336 | 121 | 230 | 36 | 48 | 32 |
| By grandparent | 550 | 251 | 93 | 80 | 28 | 51 | 9 | 24 | 13 |
| By other relative | 256 | 106 | 50 | 49 | 17 | 18 | 5 | - | 11 |
| By nonrelative | 1,608 | 866 | 245 | 207 | 76 | 161 | 22 | 24 | 7 |
| Organized child care facilities | 1,615 | 890 | 265 | 184 | 41 | 174 | 28 | 23 | 9 |
| Day/group care center | 1,024 | 567 | 177 | 111 | 20 | 105 | 18 | 16 | 9 |
| Nursery/preschool | 591 | 323 | 88 | 73 | 20 | 69 | 9 | 7 | - |
| School based activity | 148 | - | 3 | 2 | - | 107 | 19 | 13 | 4 |
| Kindergarten/grade school | 7,550 | 32 | 29 | 3 | - | 4,752 | 1,360 | 978 | 397 |
| Child cares for self | 185 | 5 | - | - | - | 94 | 45 | 9 | 31 |
| Mother cares for child at work[1] | 453 | 196 | 40 | 46 | 33 | 80 | 4 | 6 | 47 |
| **MOTHERS EMPLOYED PART TIME** | | | | | | | | | |
| Total | 8,713 | 755 | 316 | 1,234 | 528 | 1,621 | 519 | 2,635 | 905 |
| Care in child's home | 2,069 | 194 | 121 | 572 | 263 | 108 | 61 | 569 | 180 |
| By father | 1,556 | 77 | 99 | 459 | 193 | 63 | 38 | 485 | 142 |
| By grandparent | 116 | 28 | 7 | 39 | 30 | - | 6 | 5 | - |
| By other relative | 133 | 18 | 4 | 6 | 10 | 13 | 9 | 51 | 21 |
| By nonrelative | 264 | 72 | 11 | 66 | 29 | 33 | 8 | 28 | 17 |
| Care in another home | 870 | 253 | 100 | 235 | 129 | 53 | 4 | 63 | 33 |
| By grandparent | 237 | 67 | 23 | 48 | 27 | 28 | 4 | 28 | 12 |
| By other relative | 127 | 27 | 8 | 55 | 16 | 17 | - | 3 | - |
| By nonrelative | 506 | 159 | 68 | 131 | 86 | 8 | - | 32 | 21 |
| Organized child care facilities | 692 | 210 | 70 | 235 | 55 | 36 | 25 | 51 | 11 |
| Day/group care center | 415 | 123 | 41 | 146 | 31 | 36 | 7 | 20 | 11 |
| Nursery/preschool | 278 | 86 | 29 | 89 | 24 | - | 19 | 32 | - |
| School based activity | 91 | 9 | - | - | - | 16 | 3 | 36 | 26 |
| Kindergarten/grade school | 4,233 | - | 4 | 9 | 4 | 1,488 | 408 | 1,731 | 588 |
| Child cares for self | 113 | - | - | - | - | 36 | 6 | 50 | 21 |
| Mother cares for child at work[1] | 647 | 89 | 20 | 185 | 77 | 85 | 12 | 133 | 47 |

- Represents zero.

[1]Includes women working at home or away from home.

**Table 12. Standard Errors for Average Weekly Hours of Child Care Used by Employed Mothers: Fall 1988**

(In hours)

| Age of child | Hours per week spent by mother at work | Hours per week spent by children in a child care arrangement | | | | | |
|---|---|---|---|---|---|---|---|
| | | | Type of arrangement | | Location of arrangement | | |
| | | Total | Primary arrangement | Secondary arrangement | Child in school[1] | Child in non-school arrangement | Child cares for self |
| Total | 0.18 | 0.23 | 0.21 | 0.09 | 0.23 | 0.25 | 0.04 |
| Under 5 years | 0.34 | 0.41 | 0.41 | 0.13 | 0.08 | 0.41 | 0.01 |
| Less than 1 year | 0.92 | 1.16 | 1.16 | 0.30 | - | 1.17 | 0.09 |
| 1 year | 0.66 | 0.86 | 0.86 | 0.26 | 0.06 | 0.86 | - |
| 2 years | 0.71 | 0.88 | 0.86 | 0.23 | 0.06 | 0.88 | - |
| 3 years | 0.77 | 0.92 | 0.89 | 0.34 | 0.06 | 0.92 | - |
| 4 years | 0.70 | 0.86 | 0.85 | 0.31 | 0.35 | 0.92 | - |
| 5 to 14 years | 0.22 | 0.27 | 0.25 | 0.10 | 0.27 | 0.21 | 0.05 |
| 5 years | 0.70 | 0.89 | 0.77 | 0.49 | 0.77 | 0.89 | - |
| 6 years | 0.67 | 0.85 | 0.72 | 0.37 | 0.63 | 0.65 | 0.06 |
| 7 years | 0.70 | 0.85 | 0.70 | 0.34 | 0.81 | 0.55 | 0.06 |
| 8 years | 0.65 | 0.86 | 0.76 | 0.34 | 0.85 | 0.59 | 0.05 |
| 9 years | 0.66 | 0.84 | 0.72 | 0.32 | 0.80 | 0.53 | 0.09 |
| 10 years | 0.76 | 0.93 | 0.81 | 0.32 | 0.88 | 0.54 | 0.18 |
| 11 years | 0.63 | 0.85 | 0.76 | 0.30 | 0.86 | 0.55 | 0.22 |
| 12 years | 0.66 | 0.89 | 0.81 | 0.31 | 0.89 | 0.61 | 0.35 |
| 13 years | 0.70 | 0.90 | 0.81 | 0.28 | 0.90 | 0.50 | 0.23 |
| 14 years | 0.71 | 0.84 | 0.77 | 0.22 | 0.85 | 0.46 | 0.35 |

- Represents zero.

[1]Children in kindergarten/grade school or in school based activity.

## Table 13. Primary Child Care Arrangements Used by Parents for Children Under 15 Years, by Labor Force, Sex, and School Enrollment Status of Parents: Fall 1988

(In thousands)

| Type of arrangement | Child's parents in labor force or enrolled in school | | Mothers | |
|---|---|---|---|---|
| | Fathers | Mothers | Unemployed | In school |
| Total | 902 | 32,888 | 1,340 | 1,261 |
| Care in child's home | 168 | 5,858 | 268 | 432 |
| Care in another home | 84 | 4,728 | 216 | 188 |
| Organized child care facilities | 108 | 3,152 | 53 | 122 |
| School-based activity | 14 | 380 | 15 | 4 |
| Kindergarten/grade school | 490 | 17,040 | 732 | 476 |
| Child cares for self | 30 | 525 | 19 | 24 |
| Parent cares for child at work[1] | 8 | 1,206 | 37 | 14 |

[1]Includes parents working at home or away from home.



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## Table 14. Type of Work Schedule Used by Employed Mothers with Children Under 15 Years: Fall 1988

(In thousands)

| Respondent's description of type of work schedule | Number of employed mothers who work- | | | Number of children of employed mothers who work- | | |
|---|---|---|---|---|---|---|
| | Total | Daytime hours | Non-day hours | Total | Daytime hours | Non-day hours |
| All schedules | 18,902 | 13,948 | 4,953 | 30,287 | 22,230 | 8,057 |
| Regular daytime schedule | 14,219 | *12,009 | 2,209 | 22,466 | *19,006 | 3,459 |
| Regular evening shift | 1,227 | 96 | 1,132 | 2,009 | 149 | 1,861 |
| Regular night shift | 486 | 61 | 425 | 818 | 95 | 723 |
| Rotating shift[1] | 372 | 262 | 109 | 561 | 396 | 165 |
| Split shift[2] | 218 | 87 | 131 | 408 | 172 | 236 |
| Irregular schedule | 1,907 | 1,131 | 776 | 3,192 | 1,897 | 1,295 |
| All other schedules | 472 | 302 | 170 | 832 | 513 | 319 |

Note: The numbers marked with an '*' indicate the estimates of employed women and their children who work regularly scheduled day shifts.
[1]A shift that changes regularly from days to evenings or nights.
[2]A shift that consists of two distinct periods each day.

# Appendix A. **Overview of the SIPP Program**

## BACKGROUND

The Survey of Income and Program Participation (SIPP) provides a major expansion in the kind and amount of information available to analyze the economic situation of households and persons in the United States. The information supplied by this survey is expected to provide a better understanding of changes in the level of well-being of the population and how economic situations are related to the demographic and social characteristics of individuals. The data collected in SIPP will be especially useful in studying Federal transfer programs, estimating program cost and effectiveness, and assessing the effect of proposed changes in program regulations and benefit levels. Analysis of other important national issues, such as tax reform, Social Security program costs, and national child care programs can be expanded and refined, based on the information from this survey.

## SURVEY CONTENT

There are three basic elements contained in the overall design of the content of the survey. The first is a control card that serves several important functions. The control card is used to record basic social and demographic characteristics for each person in the household at the time of the initial interview. Because households in the SIPP panels of 1985 through 1987 were interviewed up to eight times, the card is also used to record changes in characteristics such as age, educational attainment, and marital status, and to record the dates when persons enter or leave the household. Finally, during each interview, information on each source of income received and the name of each job or business is transcribed to the card.

The second major element of the survey content is the core portion of the questionnaire. The core questions are repeated at each interview and cover labor force activity, the types and amounts of income received, and participation status in various programs during the 4-month reference period prior to the interview date. Some of the important elements of labor force activity are recorded separately for each week of the period. Income recipience and amounts are recorded on a monthly basis with the exception of amounts of property income (interest, dividends, rent, etc.). Data for these types are recorded as totals for the 4-month period. The core also contains questions covering attendance in postsecondary schools, private health insurance coverage, public or subsidized rental housing, low income energy assistance, and school breakfast and lunch participation.

The third major element is the various supplements or topical modules that will be included during selected household visits. The topical modules cover areas that need not be examined every 4 months. Certain of these topical modules are considered to be so important that they are viewed as an integral part of the overall survey. Other topical modules have more specific and more limited purposes. The sixth wave of the 1987 SIPP panel and the third wave of the 1988 panel contained items on child care arrangements used by families with children under 15 years of age. These panels were used to produce the data shown in this report.

## SAMPLE DESIGN

Each household in the SIPP sample is scheduled to be interviewed at 4-month periods. The reference period for most of the core income and labor force items is the 4-month period preceding the interview. For example, households interviewed in October 1988 were asked questions for the months June, July, August, and September. In the case of the child care items, the reference period is for the month prior to the interview date.

The sample households within a given panel are divided into four subsamples of nearly equal size. These subsamples are called rotation groups and one rotation group is interviewed each month. In general, one cycle of four interviews covering the entire sample, using the same questionnaire, is called a wave (occasionally, only three rotation groups are interviewed). This design was chosen because it provides a smooth and steady work load for data collection and processing.

In this report, wave 6 of the 1987 panel and wave 3 of the 1988 panel covered the common interview months of October, November, and December 1988, and January 1989. This overlapping design provides a larger sample from which cross-sectional estimates can be made. The overlap also enhances the survey's ability to measure change by lowering the standard errors on differences between estimates for two points in time.

## SURVEY OPERATIONS

Data collection operations are managed through the Census Bureau's 12 permanent regional offices. A staff of interviewers assigned to SIPP conduct interviews by personal visit each month with most interviewing completed during the first 2 weeks of that month. Completed questionnaires are transmitted to the regional offices where they undergo an extensive clerical edit before being entered into the Bureau's SIPP data processing system. Upon entering this processing system, the data are subjected to a detailed computer edit. Errors identified in this phase are corrected and computer processing continues.

Two of the major steps of computer processing are the assignment of weights to each sample person and imputation for missing survey responses. The weighting procedures assure that SIPP estimates of the number of persons agree with independent estimates of the population within specified age, race, and sex categories. The procedures also assure close correspondence with monthly CPS estimates of households. In cases where there were missing or inconsistent data in the child care items, a survey nonresponse was assigned a value in the imputation phase of processing. (See appendix D for more details about the imputation procedures.)

The longitudinal design of SIPP dictates that all persons 15 years old and over present as household members at the time of the first interview be part of the survey throughout the entire length of the survey period (about 2 1/2 years). To meet this goal the survey collects information useful in locating persons who move. In addition, field procedures were established that allow for the transfer of sample cases between regional offices. Persons moving within a 100-mile radius of an original sampling area (a county or group of counties) are followed and continue with the normal personal interviews at 4-month intervals. Those moving to a new residence that falls outside the 100-mile radius of any SIPP sampling area are interviewed by telephone. The geographic areas defined by these rules contain more than 95 percent of the U.S. population.

Because many types of analysis using SIPP data will be dependent not on data for individuals but on groups of individuals (households, families, etc.), provisions were made to interview all "new" persons living with original sample persons (those interviewed in the first wave). These new sample persons entering the survey through contact with original sample persons are considered as part of the sample only while residing with the original sample person.

# Appendix B. **Definitions and Explanations**

**Population coverage.** The estimates in this report are restricted to the civilian, noninstitutional population of the United States and members of the Armed Forces living off post or with their families on post. The estimates exclude persons in group quarters.

**Age.** The age (in years) of the child is based on the age of the person at his last birthday.

**Race.** The population is divided into three groups on the basis of race: White, Black, and "other races." The last category includes American Indians, Asian/Pacific Islanders, and any other race except White and Black.

**Hispanic origin.** Persons of Hispanic origin were determined on the basis of a question that asked for self-identification of the person's origin or descent. Respondents were asked to select their origin (or the origin of some other household member) from a "flash card" listing ethnic origins. Hispanics, in particular, were those who indicated that their origin was Mexican, Puerto Rican, Cuban, Central or South American, or some other Spanish origin. It should be noted that Hispanics may be of any race.

**Marital status.** Data refer to marital status at the time of the survey. Two classifications are used in this report: "married, spouse present" and "all other marital statuses" (also sometimes referred to as "unmarried"). The latter classification includes persons who are separated, married but whose spouse is absent from the household, widowed, divorced, or single (never married).

**Children.** Children in this report refer to all persons under 15 years old in households who are living either with their natural parents, adopted or step-parents, or with legal guardians. Excluded are children in foster homes. Preschool-age children are defined as children under 5 years old, while grade-school age children are those 5 to 14 years old. Infants are defined as children under 1 year of age.

**Child care arrangements.** Data on child care arrangements were obtained from persons interviewed during the period of October 1988 to January 1989 and who were the parents or legal guardians of children under 15 years old at the time of the interview and who were also employed, looking for work, or enrolled in school or in training during the month prior to the interview. The arrangements used to care for the children refer to the arrangements usually used during the month preceding the interview while the parent/guardian was in any one of the aforementioned activities.

Child care arrangements for each child were classified as either primary or secondary arrangements depending on which arrangement was used most and which was used second most (as measured in hours) during a typical week. Attending school and care by the child himself were also included as possible child care arrangements since they indicate what the child was doing during the hours that the mother was at work or in school.

**Child care expenses.** The monetary amounts shown in this report represent the estimated weekly costs for all children under 15 years old while the mother was at work or in school. Excluded are the amounts of any noncash payments made for child care services. Costs attributable to nursery schools or preschools are included but costs incurred when enrolling a child in kindergarten or grade school are excluded from the estimates.

If a child used an arrangement for which a separate cash payment was made to the child care provider (a separate arrangement), the hourly cost of child care was determined by dividing the cost paid to the provider by the number of hours the child was in care. If two or more children in the family were cared for by the same provider and one cash payment was made to cover the cost of all of the children in the provider's care (a shared arrangement), the hourly cost of this arrangement was determined by dividing the cost paid to the provider for all of the children by the total number of hours all the children were cared by that single provider. Hourly cost for the separate and shared arrangements are shown to illustrate variations in the pricing structure of child care arrangements under different circumstances.

**Time lost from work or school.** This refers to the time lost from work or school by the respondent or the respondent's spouse in the reference month due to a failure in obtaining child care arrangements.

**Employment status.** Persons in the child care supplement were classified as being employed in the month preceding the interview if they either (a) worked as paid

employees or worked in their own business or profession or on their own farm or worked without pay in a family business or farm, or (b) were temporarily absent from work either with or without pay.

**Full-time and part-time employment.** The data on full- and part time workers pertain to the number of hours a person usually works per week from all jobs, either as an employee or in his own business or profession. Persons who report themselves as usually working 35 or more hours each week are classified as full-time workers; persons who report that they usually work fewer than 35 hours per week are classified as part-time workers.

**Work shift.** Information on the hours during the day that the respondent was working was obtained from the work schedule module in this particular wave of SIPP. If one-half or more of the hours a respondent worked at his/her principal job fell between 8:00 am and 4:00 pm and the respondent said that these hours were regularly scheduled, then the respondent was categorized as having his/her principal job in a day shift. All other hourly schedules were categorized as being in non-day shifts. This definition is more stringent than those used by other researchers who may have included persons with irregular or split shifts in the day-shift category as long as one-half or more of their working hours were in the 8:00 am to 4:00 pm core period.

**Occupation.** Data refer to the civilian job currently held at the time of the interview. If two or more jobs were held, the occupation shown in this report refers to the job in which the respondent worked the most hours.

**Years of school completed.** Data on years of school completed in this report are derived from the combination of answers to questions concerning the highest grade of school attended by the person and whether or not that grade was completed. The following categories used in this report are based on the number of years of school completed which may or may not coincide with actual achievement of any degrees attained or diplomas granted: not a high school graduate (less than 12 years); high school graduate (12 years); college, 1 to 3 years (13 through 15 years); and college, 4 or more years (16 or more years of school completed).

**School enrollment.** School enrollment in this report includes enrollment in an elementary, high school, or college, or any vocational, technical, or business school.

**Geographic regions.** The four major regions of the United States for which data are presented in this report represent groups of States as follows:

*Northeast:* Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

*Midwest:* Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

*South:* Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

*West:* Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

**Metropolitan-nonmetropolitan residence.** The population residing in metropolitan statistical areas (MSA's) constitutes the metropolitan population. MSA's are defined by the Office of Management and Budget for use in presentation of statistics by agencies of the Federal Government. An MSA is a geographic area consisting of a large population nucleus, together with adjacent communities which have a high degree of economic and social integration. The definitions specify a boundary around each large city so as to include most or all of its suburbs. Entire counties form the MSA building blocks, except in New England where cities and towns are used.

An area qualifies for recognition as an MSA if (1) it includes a city of at least 50,000 population, or (2) it includes a Census Bureau-defined urbanized area of at least 50,000 with a total metropolitan population of at least 100,000 (75,000 in New England). In addition to the country containing the main city or urbanized area, an MSA may include other counties having strong commuting ties to the central county.

**Central cities.** The largest city in each MSA is always designated a central city. There may be additional central cities if specified requirements, designed to identify places of central character with the MSA, are met. The balance of the MSA outside the central city or cities is often regarded as equivalent to the "suburbs."

**Family income.** Family money income represents the total money income of all members of the family. It is the average monthly amount reported for the 4-month period prior to the survey date. The income estimates cited in this report are based on money income alone and do not include the value of noncash benefits.

**Mean income.** The mean income is the amount obtained by dividing the total income of a group by the number of units in that group.

**Poverty level.** Persons whose monthly family income for the 4-month period prior to the survey interview fell below the average monthly poverty level cutoff for that family were determined to be living in poverty in this report. The poverty threshold for a family of 4 in 1988 was about $12,092 annually or $1,008 per month.

**Symbols.** A dash (-) represents zero or a number which rounds to zero; "B" means that the base is too small to show the derived measure (less than 200,000 persons); "X" means not applicable and "NA" indicates that the data are not available.

**Rounding of estimates.** Individual numbers are rounded to the nearest thousand without being adjusted to group totals which are independently rounded. Derived measures are based on unrounded numbers when possible; otherwise, they are based on the rounded numbers.

# Appendix C. **Source and Accuracy of Estimates**

## SOURCE OF DATA

The SIPP universe is the noninstitutionalized resident population living in the United States. This population includes persons living in group quarters, such as dormitories, rooming houses, and religious group dwellings. Crew members of merchant vessels, Armed Forces personnel living in military barracks, and institutionalized persons, such as correctional facility inmates and nursing home residents, were not eligible to be in the survey. Also, United States citizens residing abroad were not eligible to be in the survey. Foreign visitors who work or attend school in this country and their families were eligible; all others were not eligible. With the exceptions noted above, persons who were at least 15 years of age at the time of the interview were eligible to be interviewed in the survey.

The 1987 and 1988 panel SIPP samples are located in 230 Primary Sampling Units (PSUs) each consisting of a county or a group of contiguous counties. Within these PSUs, expected clusters of two living quarters (LQs) were systematically selected from lists of addresses prepared for the 1980 decennial census to form the bulk of the sample. To account for LQs built within each of the sample areas after the 1980 census, a sample containing clusters of four LQs was drawn from permits issued for construction of residential LQs up until shortly before the beginning of the panel.

In jurisdictions that don't issue building permits or have incomplete addresses, small land areas were sampled and expected clusters of four LQs within were listed by field personnel and then subsampled. In addition, sample LQs were selected from a supplemental frame that included LQs identified as missed in the 1980 census.

The first interview of the 1987 and 1988 panels was conducted during February, March, April, and May of 1987 and 1988 respectively. Approximately one-fourth of the sample was interviewed in each of these months. Each sample person was visited every 4 months thereafter. At each interview the reference period was the 4 months preceding the interview month.

Occupants of about 93 percent of all eligible living quarters participated in the first interview of each panel. For subsequent interviews, only original sample persons and persons living with them were eligible to be interviewed. Original sample persons were followed if they moved to a new address, unless the new address was more than 100 miles from a SIPP sample area. Then, telephone interviews were attempted. All first wave noninterviewed households were automatically designated as noninterviews for all subsequent interviews. When original sample persons moved to remote parts of the country and couldn't be reached by telephone, moved without leaving a forwarding address, or refused to be interviewed, additional noninterviews resulted.

As a part of most waves, subjects are covered that don't require repeated measurement during the panel - subjects are covered once during the panel or annually - and are of particular interest to data users and policy makers. Also, respondent burden is reduced by collecting data once for the panel or annually. A specific set of topical questions are referred to as a topical module. For this report the topical modules analyzed include questions on child care. They were implemented in Wave 6 of the 1987 panel and Wave 3 of the 1988 panel.

Since Wave 6 of the 1987 panel and wave 3 of the 1988 panel are concurrent and contain the same relevant topical modules on child care, the data were combined and analyzed as a single data set. The primary motivation for combining this data is to obtain an increase in sample size and offset the effects, if any, of panel conditioning and nonresponse over the life of the panel.

**Noninterviews.** Tabulations in this report were drawn from interviews conducted from October 1988 through January 1989. Table C-1 summarizes information on nonresponse rates for the interview months in which the data used to produce this report were collected.

Table C-1. **Combined 1987 and 1988 Panel Household Sample Size by Month and Interview Status**

| Month | Eligible | Interviewed | Noninterviewed | Nonresponse rate (percent)[1] |
|---|---|---|---|---|
| October 1988 | 6500 | 5600 | 900 | 14 |
| November 1988 | 6400 | 5500 | 900 | 14 |
| December 1988 | 6400 | 5600 | 900 | 14 |
| January 1989 | 6400 | 5500 | 800 | 13 |

[1]Due to rounding of all numbers at 100, there are some inconsistencies. The percentage was calculated using unrounded numbers.

Some respondents do not respond to some of the questions. Therefore, the overall nonresponse rate for some items such as income and money related items

are higher than the nonresponse rates in table C-1. For more discussion of nonresponse see the Quality Profile for the Survey of Income and Program Participation, May 1990, by T. Jabine, K. King, and R. Petroni, available from Customer Services, Data Users Services Division, of the U.S. Census Bureau (301-763-6100).

## ESTIMATION

The estimation procedure used to derive SIPP person weights in each panel involved several stages of weight adjustments. In the first wave, each person received a base weight equal to the inverse of his/her probability of selection. For each subsequent interview, each person received a base weight that accounted for movers.

A noninterview factor was applied to the weight of every occupant of interviewed households to account for persons in noninterviewed occupied households which were eligible for the sample. (Individual Inonresponse within partially interviewed households was treated with imputation. No special adjustment was made for noninterviews in group quarters.)

A factor was applied to each interviewed person's weight to account for the SIPP sample areas not having the same population distribution as the strata from which they were selected.

The Bureau has used complex techniques to adjust the weights for nonresponse. For a further explanation of the techniques used, see the *Nonresponse Adjustment Methods for Demographic Surveys at the U.S. Bureau of the Census*, November 1988, Working paper 8823, by R. Singh and R. Petroni. The success of these techniques in avoiding bias is unknown. An example of successfully avoiding bias can be found in "Current Nonresponse Research for the Survey of Income and Participation" (paper by Petroni, presented at the Second International Workshop on Household Survey Nonresponse, October 1991).

An additional stage of adjustment to persons' weights was performed to reduce the mean square errors of the survey estimates. This was accomplished by ratio adjusting the sample estimates to agree with monthly Current Population Survey (CPS) type estimates of the civilian (and some military) noninstitutional population of the United States by demographic characteristics including age, sex, and race as of the specified date. The CPS estimates by age, sex, and race were themselves brought into agreement with estimates from the 1980 decennial census which have been adjusted to reflect births, deaths, immigration, emigration, and changes in the Armed Forces since 1980. In addition, SIPP estimates were controlled to independent Hispanic controls and an adjustment was made so that husbands and wives within the same household were assigned equal weights. All of the above adjustments are implemented for each reference month and the interview month. .

## ACCURACY OF ESTIMATES

SIPP estimates are based on a sample; they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same questionnaire, instructions, and enumerators. There are two types of errors possible in an estimate based on a sample survey: nonsampling and sampling. We are able to provide estimates of the magnitude of SIPP sampling error, but this is not true of nonsampling error. Found in the next sections are descriptions of sources of SIPP nonsampling error, followed by a discussion of sampling error, its estimation, and its use in data analysis.

**Nonsampling Variability.** Nonsampling errors can be attributed to many sources, e.g., inability to obtain information about all cases in the sample; definitional difficulties particularly in the term "child care arrangement" (the interpretation may vary by region and/or government regulations in the area); differences in the interpretation of questions; inability or unwillingness on the part of the respondents to provide correct information, particularly if they feel the correct answer is an undesirable one; inability to recall information, errors made in the following: collection such as in recording or coding the data, processing the data, estimating values for missing data; biases resulting from the differing recall periods caused by the interviewing pattern used; and undercoverage. Quality control and edit procedures were used to reduce errors made by respondents, coders and interviewers. More detailed discussions of the existence and control of nonsampling errors in the SIPP can be found in the *SIPP Quality Profile*.

Undercoverage in SIPP results from missed living quarters and missed persons within sample households. It is known that undercoverage varies with age, race, and sex. Generally, undercoverage is larger for males than for females and larger for Blacks than for Nonblacks. Ratio estimation to independent age-race-sex population controls partially corrects for the bias due to survey undercoverage. However, biases exist in the estimates to the extent that persons in missed households or missed persons in interviewed households have characteristics different from those of interviewed persons in the same age-race-sex group. Further, the independent population controls used have not been adjusted for undercoverage in the Census.

A bias may also occur in estimates related to unsupervised children. An example of such an estimate is total number of unsupervised children. The following causes for bias are suggested.

1. The complexity of the questions and concepts used to identify unsupervised children may have led to confusion among respondents.

2. In some jurisdictions the parents of children found to be "unsupervised" could be charged with the crime "child neglect."
3. Respondents may fear they are placing a child in jeopardy by disclosing that the child is alone or unsupervised.
4. It may be more socially desirable to report that a child is supervised than that the child is not supervised.

The misreporting of any specific child care arrangement may affect the overall distribution of child care arrangements shown in this report. For example, an underestimate in the proportion of children being left without adult supervision would result in overestimates for one or more of the other child care arrangements.

**Comparability with Other Estimates.** Caution should be exercised when comparing data from this report with data from other SIPP publications or with data from other surveys. The comparability problems are caused by such sources as the seasonal patterns for many characteristics, different nonsampling errors, and different concepts and procedures. Refer to the *SIPP Quality Profile* for known differences with data from other sources and further discussion.

**Sampling Variability.** Standard errors indicate the magnitude of the sampling error. They also partially measure the effect of some nonsampling errors in response and enumeration, but do not measure any systematic biases in the data. The standard errors for the most part measure the variations that occurred by chance because a sample rather than the entire population was surveyed.

## USES AND COMPUTATION OF STANDARD ERRORS

**Confidence Intervals.** The sample estimate and its standard error enable one to construct confidence intervals, ranges that would include the average result of all possible samples with a known probability. For example, if all possible samples were selected, each of these being surveyed under essentially the same conditions and using the same sample design, and if an estimate and its standard error were calculated from each sample, then:

1. Approximately 68 percent of the intervals from one standard error below the estimate to one standard error above the estimate would include the average result of all possible samples.
2. Approximately 90 percent of the intervals from 1.6 standard errors below the estimate to 1.6 standard errors above the estimate would include the average result of all possible samples.
3. Approximately 95 percent of the intervals from two standard errors below the estimate to two standard errors above the estimate would include the average result of all possible samples.

The average estimate derived from all possible samples is or is not contained in any particular computed interval. However, for a particular sample, one can say with a specified confidence that the average estimate derived from all possible samples is included in the confidence interval.

**Hypothesis Testing.** Standard errors may also be used for hypothesis testing, a procedure for distinguishing between population characteristics using sample estimates. The most common types of hypotheses tested are 1) the population characteristics are identical versus 2) they are different. Tests may be performed at various levels of significance, where a level of significance is the probability of concluding that the characteristics are different when, in fact, they are identical.

All statements of comparison in the report have passed a hypothesis test at the 0.10 level of significance or better. This means that, for differences cited in the report, the estimated absolute difference between parameters is greater than 1.6 times the standard error of the difference.

To perform the most common test, compute the difference $X_A - X_B$, where $X_A$ and $X_B$ are sample estimates of the characteristics of interest. A later section explains how to derive an estimate of the standard error of the difference $X_A - X_B$. Let that standard error be $s_{DIFF}$. If $X_A - X_B$ is between -1.6 times $s_{DIFF}$ and +1.6 times $s_{DIFF}$, no conclusion about the characteristics is justified at the 10 percent significance level. If, on the other hand, $X_A - X_B$ is smaller than -1.6 times $s_{DIFF}$ or larger than +1.6 times $s_{DIFF}$, the observed difference is significant at the 10 percent level. In this event, it is commonly accepted practice to say that the characteristics are different. Of course, sometimes this conclusion will be wrong. When the characteristics are, in fact, the same, there is a 10 percent chance of concluding that they are different.

Note that as more tests are performed, more erroneous significant differences will occur. For example, at the 10 percent significance level, if 100 independent hypothesis tests are performed in which there are no real differences, it is likely that about 10 erroneous differences will occur. Therefore, the significance of any single test should be interpreted cautiously.

**Note Concerning Small Estimates and Small Differences.** Summary measures are shown in the report only when the base is 200,000 or greater. Because of the large standard errors involved, there is little chance that estimates will reveal useful information when computed on a base smaller than 200,000. Also, nonsampling error in one or more of the small number of cases

providing the estimate can cause large relative error in that particular estimate. Estimated numbers are shown, however, even though the relative standard errors of these numbers are larger than those for the corresponding percentages. These smaller estimates are provided primarily to permit such combinations of the categories as serve each user's needs. Therefore, care must be taken in the interpretation of small differences since even a small amount of nonsampling error can cause a borderline difference to appear significant or not, thus distorting a seemingly valid hypothesis test.

**Standard Error Parameters and Tables and Their Use.** Most SIPP estimates have greater standard errors than those obtained through a simple random sample because clusters of living quarters are sampled for the SIPP. To derive standard errors that would be applicable to a wide variety of estimates and could be prepared at a moderate cost, a number of approximations were required. Estimates with similar standard error behavior were grouped together and two parameters (denoted "a" and "b") were developed to approximate the standard error behavior of each group of estimates. Because the actual standard error behavior was not identical for all estimates within a group, the standard errors computed from these parameters provide an indication of the order of magnitude of the standard error for any specific estimate. These "a" and "b" parameters vary by characteristic and by demographic subgroup to which the estimate applies. Table C-2 provides base "a" and "b" parameters to be used for Fall 1988 estimates.

For those users who wish further simplification, we have also provided general standard errors in tables C-3 and C-4. Note that these standard errors must be adjusted by a factor from table C-2. The standard errors resulting from this simplified approach are less accurate. Methods for using these parameters and tables for computation of standard errors are given in the following sections.

**Standard Errors of Estimated Numbers.** There are two ways to compute the approximate standard error, $s_x$, of an estimated number shown in this report. The first uses the formula

$$s_x = fs \qquad (1)$$

where f is a factor from table C-2, and s is the standard error of the estimate obtained by interpolation from table C-3. Alternatively, $s_x$ may be approximated by the formula,

$$s_x = \sqrt{ax^2 + bx} \qquad (2)$$

from which the standard errors in table C-3 were calculated. Here x is the size of the estimate and a and b are the parameters in table C-2 associated with the particular type of characteristic. Use of formula 2 will provide more accurate results than the use of formula 1. When calculating standard errors for numbers from cross-tabulations involving different characteristics, use the factor or set of parameters for the characteristic which will give the largest standard error.

*Illustration.* The SIPP estimate of the total number of children under 15 years old living in the United States with working mothers in Fall 1988 is 30,287,000. The appropriate "a" and "b" parameters to use in calculating a standard error for the estimate are obtained from table C-2. They are a = -0.0000848 and b = 4755, respectively. Using formula (2), the approximate standard error is

$$\sqrt{(-0.0000848)\,(30{,}287{,}000)^2 + (4755)\,(30{,}287{,}000)} = 257{,}000$$

The 90-percent confidence interval as shown by the data is from 29,876,000 to 30,698,000. Therefore, a conclusion that the average estimate derived from all possible samples lies within a range computed in this way would be correct for roughly 90 percent of all samples.

Using formula (1), the appropriate "f" factor (f = .52) from table C-2, and the standard error of the estimate by interpolation using table 3, the appropriate standard error is

$$s_x = (0.52)\,(676{,}000) = 352{,}000$$

The 90-percent confidence interval as shown by the data is from 29,724,000 to 30,850,000.

**Standard Errors of Estimated Percentages.** The reliability of an estimated percentage, computed using sample data for both numerator and denominator, depends on the size of the percentage and its base. When the numerator and denominator of the percentage have different parameters, use the parameter (or appropriate factor) from table C-2 indicated by the numerator.

The approximate standard error, $s_{(x,p)}$, of an estimated percentage p can be obtained by use of the formula

$$s_{(x,p)} = fs \qquad (3)$$

where p is the percentage of persons/families/households with a particular characteristic such as the percent of persons owning their own homes.

In this formula, f is the appropriate "f" factor from table C-2 and s is the standard error of the estimate obtained by interpolation from table C-4.

Alternatively, it may be approximated by the formula:

$$s_{(x,p)} = \sqrt{\frac{b}{x}(p)(100\text{-}p)} \qquad (4)$$

from which the standard errors in table C-4 were calculated. Here x is the total number of persons, families, households, or unrelated individuals in the base of the percentage, p is the percentage (0 p 100), and b is the "b" parameter in table C-2 associated with the characteristic in the numerator of the percentage. Use of this formula will give more accurate results than use of formula (3) above.

*Illustration.* The SIPP estimate for the number of children under 15 years old is 53,448,000. Of these, 56.7 percent had working mothers in Fall 1988. Using formula (4) and the "b" parameter of 4755 (from table C-2), the approximate standard error is

$$\sqrt{\frac{(4755)}{(53{,}448{,}000)}(56.7)\,(100 - 56.7)} = 0.5\%$$

Consequently, the 90-percent confidence interval as shown by these data is from 55.9 to 57.5 percent.

Using formula (3), the appropriate "f" factor (f = 0.52) from table C-2, and the appropriate s by interpolation using table C-4, the approximate standard error is

$$s_x = (0.52)\,(0.9) = 0.5\%$$

The 90-percent confidence interval shown by these data is from 55.9 to 57.5 percent.

**Standard Error of a Difference.** The standard error of a difference between two sample estimates, x and y, is approximately equal to

$$s_{(x-y)} = \sqrt{s_x^2 + s_y^2 - 2rs_xs_y} \qquad (5)$$

where sx and sy are the standard errors of the estimates x and y and r is the correlation coefficient between the characteristics estimated by x and y. The estimates can be numbers, averages, percents, ratios, etc. Underestimates or overestimates of standard error of differences result if the estimated correlation coefficient is overestimated or underestimated, respectively. In this report, r is assumed to be 0.

*Illustration.* Suppose that we are interested in the difference in the percentage of children that receive primary child care in the child's home versus primary child care in another home in Fall 1988. Of the 30,287,000 children with employed mothers, 17.0 percent were cared for in the child's home and 14.3 percent were cared for in another home. Using parameters from table C-2, the standard errors of these percentages are approximately 0.5 percent for children cared for in the child's home and 0.4 percent for children cared for in another home.

Now, the standard error of the difference is computed using the above two standard errors. The correlation between these estimates is assumed to be zero. Therefore, the standard error of the difference is computed by formula (5):

$$\sqrt{(0.5)^2 + (0.4)^2} = 0.6\%$$

Suppose that it is desired to test at the 10 percent significance level whether the percentage of children cared for in the child's home differs significantly from the percentage of children cared for in another home. To perform the test, compare the difference of 2.7% to the product 1.6 x 0.6% = 1.0%. Since the difference is larger than 1.6 times the standard error of the difference, the data show that the estimates for the percentage of children cared for in the home and children cared for in another home differ significantly at the 10 percent level.

Table C-2. **SIPP Variance Parameters for Fall 1988 Child Care Estimates (1987 Wave 6/1988 Wave 3)**

| Characteristic | a | b | f |
|---|---|---|---|
| Children 0-14 years | -0.0000848 | 4755 | 0.52 |
| Total or White (15+ years) Income and labor force | | | |
| Both sexes | -0.0000245 | 4522 | 0.52 |
| Male | -0.0000511 | 4522 | 0.52 |
| Female | -0.0000468 | 4522 | 0.52 |
| Black (15+ years) All others | | | |
| Both sexes | -0.0002071 | 6084 | 0.61 |
| Male | -0.0004423 | 6084 | 0.61 |
| Female | -0.0003893 | 6084 | 0.61 |

Table C-3. **Standard Errors of Estimated Numbers of Persons for Fall 1988 Estimates**

(Numbers in Thousands)

| Size of estimate | Standard error | Size of estimate | Standard error |
|---|---|---|---|
| 200 | 59 | 50,000 | 828 |
| 300 | 72 | 80,000 | 961 |
| 600 | 102 | 100,000 | 1,006 |
| 1,000 | 131 | 130,000 | 1,018 |
| 2,000 | 185 | 135,000 | 1,013 |
| 5,000 | 291 | 150,000 | 990 |
| 8,000 | 366 | 200,000 | 767 |
| 11,000 | 426 | 220,000 | 576 |
| 13,000 | 461 | 230,000 | 426 |
| 15,000 | 493 | | |
| 17,000 | 523 | | |
| 22,000 | 588 | | |
| 26,000 | 633 | | |
| 30,000 | 674 | | |

Table C-4. **Standard Errors of Estimated Percentages of Persons for Fall 1988 Estimates**

| Base of estimated percentage (thousands) | Estimated percentages | | | | | |
|---|---|---|---|---|---|---|
| | 1 or 99 | 2 or 98 | 5 or 95 | 10 or 90 | 25 or 75 | 50 |
| 200 | 2.9 | 4.1 | 6.4 | 8.8 | 12.7 | 14.7 |
| 300 | 2.4 | 3.4 | 5.2 | 7.2 | 10.4 | 12.0 |
| 600 | 1.7 | 2.4 | 3.7 | 5.1 | 7.4 | 8.5 |
| 1,000 | 1.3 | 1.8 | 2.9 | 3.9 | 5.7 | 6.6 |
| 2,000 | 0.9 | 1.3 | 2.0 | 2.8 | 4.0 | 4.6 |
| 5,000 | 0.6 | 0.8 | 1.3 | 1.8 | 2.5 | 2.9 |
| 8,000 | 0.5 | 0.7 | 1.0 | 1.4 | 2.0 | 2.3 |
| 11,000 | 0.4 | 0.6 | 0.9 | 1.2 | 1.7 | 2.0 |
| 13,000 | 0.4 | 0.5 | 0.8 | 1.1 | 1.6 | 1.8 |
| 17,000 | 0.3 | 0.4 | 0.7 | 1.0 | 1.4 | 1.6 |
| 22,000 | 0.3 | 0.4 | 0.6 | 0.8 | 1.2 | 1.4 |
| 26,000 | 0.3 | 0.4 | 0.6 | 0.8 | 1.1 | 1.3 |
| 30,000 | 0.2 | 0.3 | 0.5 | 0.7 | 1.0 | 1.2 |
| 50,000 | 0.2 | 0.3 | 0.4 | 0.6 | 0.8 | 0.9 |
| 80,000 | 0.1 | 0.2 | 0.3 | 0.4 | 0.6 | 0.7 |
| 100,000 | 0.1 | 0.2 | 0.3 | 0.4 | 0.6 | 0.7 |
| 130,000 | 0.1 | 0.2 | 0.3 | 0.3 | 0.5 | 0.6 |
| 180,000 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 |
| 200,000 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 |
| 230,000 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.4 |
| 250,000 | 0.1 | 0.1 | 0.2 | 0.2 | 0.4 | 0.4 |

# Appendix D. **Data Quality**

**Imputation procedures.** Two principal determinants of the quality of data collected in household surveys are the magnitude of the imputed responses and the accuracy of the responses that are provided. This appendix provides information on the imputation rates for selected child care items in the Survey of Income and Program Participation. The Fall 1988 data include the combined 1987 Wave 6 and 1988 Wave 3 panels conducted from October 1988 to January 1989, referring to child care arrangements used in the month prior to the survey.

Imputed responses refer either to missing responses for specific questions or "items" in the questionnaire or to responses that were rejected in the editing procedure because of improbable or inconsistent responses. An example of the latter is when a 14 year old child is said to be cared for in a nursery school during the time his or her parent is at work.

The estimates shown in this report are produced after all items have been edited and imputed whenever necessary. Missing or inconsistent responses to specific items are assigned a value in the imputation phase of the data processing operation. The procedure used to assign or impute most responses for missing or inconsistent data for the SIPP is commonly referred to as the "hot deck" imputation method. The process assigns item values reported in the survey by respondents to nonrespondents. The respondent from whom the value is taken is called the "donor." Values from donors are assigned by controlling edited demographic and labor force data available for both donors and nonrespondents. The control variables used for child care items generally included the age of the child for whom there was missing data, the parent's marital status, and whether the parent was employed full or part time, looking for work or attending school.

**Item nonresponses.** Imputation rates for both primary and secondary child care arrangements (items 3a and 4a in the questionnaire shown in appendix E) for the respondents' three youngest children are shown in table D-1. The imputation rates are calculated by dividing the number of missing or inconsistent responses by the total number of responses that should have been provided based on the number of children in the household who required child care responses. In general, the level of imputation for primary child care arrangements for employed women in the SIPP panels in this report averaged about 7 percent. Lower imputation rates were found for secondary arrangements (about 3 percent).

Table D-2 shows imputation rates for selected items concerning cash payments made for child care arrangements and the number of hours per week used for child care arrangements. About 10 percent of the responses concerning whether a cash payment was made for the child's primary child care arrangement were imputed; another 4 percent failed to answer the question if any cash payment was made for secondary child care services. For those who were determined to have made a cash payment, about 13 percent failed to report on the amount of the payment for the primary arrangement while 9 percent failed to report the cash amount for the secondary arrangement.

Imputation rates for cash payment items were higher in this survey than in previous years because more detail on cash payments were asked in Fall 1988. In previous SIPP child care modules, only one question was asked on total cash payments for all children and for all arrangements. While information in 1988 was obtained in more detail and greatly enhanced the value of the data set, nonresponse rates increased because more specific knowledge was required of the respondent.

Additional difficulties in data collection existed in 1988 that were not present in prior years. In cases where two or more children shared the same arrangement and when only one payment was made for the arrangement, respondents were asked to indicate which children shared arrangements and the total cost for the shared arrangement. Approximately 11 percent of the respondents failed to indicate if the primary arrangements were shared and another 8 percent failed to indicate if the secondary arrangements were shared. Hence, an additional degree of uncertainty was added to procedure which ultimately derived the total cost of all arrangements.

**Hours spent in child care.** Approximately 13 to 14 percent of respondents in the survey had their responses imputed on the number of hours their children spent each week in child care. Hours that the child spent commuting to school or to the arrangement were not counted as part of the arrangement for several reasons. First, travel time on a bus is clearly not equivalent to time spent under a provider's supervision. Researchers

attempting to estimate the time children spend in day care centers or nursery schools would not want to include supervision by a bus driver in their estimates. Secondly, since child care costs per hour were computed in this report, adding unpaid travel time to the arrangement time would clearly bias the hourly child care costs downward.

Table D-1. **Imputation Rates for Primary and Secondary Child Care Arrangements for Children Under 15 Years: Fall 1988**

(Data represent actual numbers of arrangements mentioned in the survey. Data are shown for arrangements for all children under 15 years of parents in the labor forceor in school)

| Type of arrangement | Primary arrangement[1] | | | Secondary arrangement[2] | | |
|---|---|---|---|---|---|---|
| | Total | Number imputed | Percent imputed | Total | Number imputed | Percent imputed |
| Total | 8,457 | 594 | 7.0 | 2,680 | 86 | 3.2 |
| Child's other parent/ stepparent | 856 | 50 | 5.8 | 445 | 5 | 1.1 |
| Child's brother/sister | 122 | 7 | 5.7 | 195 | 9 | 4.6 |
| Child's grandparent | 566 | 50 | 8.8 | 438 | 23 | 5.3 |
| Other relative of child | 221 | 13 | 5.9 | 154 | 3 | 1.9 |
| Nonrelative of child | 942 | 70 | 7.4 | 593 | 18 | 3.0 |
| Day/group care center | 514 | 36 | 7.0 | 202 | 5 | 2.5 |
| Nursery/preschool | 274 | 28 | 10.2 | 66 | 2 | 3.0 |
| School based activity | 99 | 5 | 5.1 | 87 | 7 | 8.0 |
| Kindergarten/grade school | 4,408 | 299 | 6.8 | 129 | 2 | 1.6 |
| Child cares forself | 136 | 12 | 8.8 | 268 | 10 | 3.7 |
| Parent works at home | 217 | 15 | 6.9 | 57 | - | - |
| Parent cares for child at work[3] | 99 | 9 | 9.1 | 46 | - | 4.3 |
| Child not born as of last month | 3 | - | - | - | - | - |

- Represents zero.
[1]Item 3a in questionnaire.
[2]Item 4a in questionnaire.
[3]Includes parents caring for children while enrolled in school or looking for work.

The reader should also be aware that these estimates probably contain rounding errors resulting from the respondent mentally computing weekly estimates from the additional of daily time estimates which may involve fractional hours. The specificity of the question does not necessarily result in an equivalently accurate estimate. Estimating intervening travel between arrangements, which could involve several different trips over the course of a typical grade-school-age child's day, could involve memory and computational errors large enough to make these estimates less than reliable.

Table D-2. **Imputation Rates for Selected Child Care Items: Fall 1988**

(Data represent actual numbers of arrangements mentioned in the survey. Data are shown for arrangements for all children under 15 years of parents in the labor force or in school)

| Item number | Question | Number of arrangements | Number imputed | Percent imputed |
|---|---|---|---|---|
| | Any money payment made?[1] | | | |
| 3c | Primary arrangement | 2,616 | 259 | 9.9 |
| 4c | Secondary arrangement | 1,540 | 64 | 4.2 |
| | Is payment shared?[2] | | | |
| 3d | Primary arrangement | 1,268 | 143 | 11.3 |
| 4d | Seconday arrangement | 664 | 51 | 7.7 |
| | Amount of payment | | | |
| 3e | Primary arrangement | 1,921 | 249 | 13.0 |
| 4e | Secondary arrangement | 892 | 82 | 9.2 |
| | Hours per week in arrangement | | | |
| 3f | Primary arrangement | 8,454 | 1,109 | 13.1 |
| 4f | Secondary arrangement | 2,680 | 365 | 13.6 |

[1]Limited to respondents using grandparents, other relatives, nonrelatives, day/group care centers, nursery/preschools, or school-based activities as arrangements.
[2]Limited torespondents who were parents or guardians of two or more children.

# Appendix E. **Facsimile of SIPP Child Care Module**

**Section 5 — TOPICAL MODULES (Continued)**

**Part B — CHILD CARE**

CHECK ITEM T7

*Refer to cc items 27 and 24.*
Is . . . the designated parent or guardian of children under 15 years of age who live in this household?

$100 1☐ Yes
2☐ No — *SKIP to Check Item T12, page 60*

CHECK ITEM T8

Is "Worked" (code 170) marked on the ISS?

$102 1☐ Yes — *SKIP to Check Item T6*
2☐ No

CHECK ITEM T9

*Refer to item 30a, page 13.*
Was . . . enrolled in school during the reference period?

$103 1☐ Yes
2☐ No — *SKIP to Check Item T5*

**1. About how many hours per week did . . . usually spend in school last month?**

$104 ☐☐ Hours
OR
x1☐ Hours varied
x2☐ Don't know
x3☐ Not enrolled last month
} *SKIP to Check Item T6*

CHECK ITEM T10

*Refer to item 2a, page 2.*
Did . . . spend any time looking for work or on layoff from a job during the reference period?

$106 1☐ Yes
2☐ No — *SKIP to Check Item T12, page 60*

**2. About how many hours per week did . . . usually spend looking for a job last month?**

$108 ☐☐ Hours
OR
x1☐ Hours varied
x2☐ Don't know
x3☐ Did not look for a job last month — *SKIP to Check Item T12, page 60*

NOTES



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## Section 5 — TOPICAL MODULES (Continued)

### Part B — CHILD CARE (Continued)

CHECK ITEM T5: *Refer to cc items 18, 19, 24, and 27.*

*Beginning with the youngest child enter person numbers, ages, and names of children under 15, who are household members, for whom the person is a parent or guardian.*

| | YOUNGEST | SECOND YOUNGEST | THIRD YOUNGEST |
|---|---|---|---|
| | B114 Person No. ___ Age ___ Name ___ | B116 Person No. ___ Age ___ Name ___ | B118 Person No. ___ Age ___ Name ___ |

*ASK 3a–4f for the youngest child and then read 3a–4f for the second and third youngest.*

**Now we have some questions about how the children in this household were cared for while . . . was working (in school/looking for a job).**

**3a. During** *(Last month)*, **what was** *(Name of child)* **usually doing or how was** *(Name of child)* **usually cared for during most of the hours that . . . worked (was in school/was looking for a job)?**

***Mark the arrangement in which the child spent the most hours in a typical week last month.***

*Mark (X) only one box.*

| | YOUNGEST | SECOND YOUNGEST | THIRD YOUNGEST |
|---|---|---|---|
| | B120 | B122 | B124 |
| 1 | ☐ Child's other parent/stepparent | ☐ Child's other parent/stepparent | ☐ Child's other parent/stepparent |
| 2 | ☐ Child's brother/sister | ☐ Child's brother/sister | ☐ Child's brother/sister |
| 3 | ☐ Child's grandparent | ☐ Child's grandparent | ☐ Child's grandparent |
| 4 | ☐ Other relative of child | ☐ Other relative of child | ☐ Other relative of child |
| 5 | ☐ Nonrelative of child | ☐ Nonrelative of child | ☐ Nonrelative of child |
| 6 | ☐ Child in day/group care center | ☐ Child in day/group care center | ☐ Child in day/group care center |
| 7 | ☐ Child in nursery/preschool | ☐ Child in nursery/preschool | ☐ Child in nursery/preschool |
| 8 | ☐ Child in organized school-based activity (before/after school) | ☐ Child in organized school-based activity (before/after school) | ☐ Child in organized school-based activity (before/after school) |
| 9 | ☐ Child in kindergarten, elementary or secondary school | ☐ Child in kindergarten, elementary or secondary school | ☐ Child in kindergarten, elementary or secondary school |
| | *SKIP to Check Item T7* | *SKIP to Check Item T7* | *SKIP to Check Item T7* |
| 10 | ☐ Child cares for self | ☐ Child cares for self | ☐ Child cares for self |
| 11 | ☐ . . . works at home | ☐ . . . works at home | ☐ . . . works at home |
| 12 | ☐ . . . cares for child at work (in class/while job hunting) | ☐ . . . cares for child at work (in class/while job hunting) | ☐ . . . cares for child at work (in class/while job hunting) |
| | *SKIP to Check Item T7* | *SKIP to Check Item T7* | *SKIP to Check Item T7* |
| 13 | ☐ Child not born and/or . . . not guardian as of last month | ☐ Child not born and/or . . . not guardian as of last month | ☐ Child not born and/or . . . not guardian as of last month |
| | *SKIP to next child or Check Item T12, page 60* | *SKIP to next child or Check Item T12, page 60* | *SKIP to next child or Check Item T12, page 60* |
| 14 | ☐ . . . did not work, go to school, or look for job last month | | |
| | *SKIP to 5c, page 59* | | |

**b. Was** *(Name of child)* **usually cared for at his/her home, at someone else's home, or at some other place?**

| | YOUNGEST | SECOND YOUNGEST | THIRD YOUNGEST |
|---|---|---|---|
| | B126 | B128 | B130 |
| 1 | ☐ Child's home | ☐ Child's home | ☐ Child's home |
| 2 | ☐ Other private home | ☐ Other private home | ☐ Other private home |
| 3 | ☐ Other place | ☐ Other place | ☐ Other place |

CHECK ITEM T: Is box 3–8 marked in item 3a?

| | YOUNGEST | SECOND YOUNGEST | THIRD YOUNGEST |
|---|---|---|---|
| | B132 | B134 | B136 |
| 1 | ☐ Yes | ☐ Yes | ☐ Yes |
| 2 | ☐ No – *SKIP to 3f, page 58* | ☐ No – *SKIP to 3f, page 58* | ☐ No – *SKIP to 3f, page 58* |

**3c. Was any money payment usually made for this arrangement?**

| | YOUNGEST | SECOND YOUNGEST | THIRD YOUNGEST |
|---|---|---|---|
| | B138 | B140 | B142 |
| 1 | ☐ Yes | ☐ Yes – *SKIP to 3d* | ☐ Yes – *SKIP to 3d* |
| 2 | ☐ No – *SKIP to 3f, page 58* | ☐ No – *SKIP to 3f, page 58* | ☐ No – *SKIP to 3f, page 58* |

CHECK ITEM T: Are there 2 or more children listed in Check Item T6?

| | YOUNGEST |
|---|---|
| | B144 |
| 1 | ☐ Yes |
| 2 | ☐ No – *SKIP to 3e* |

*ASK OR VERIFY –*

**3d. Does . . . (or . . .'s family) pay for** *(Name of child)*'s **child care separately, or does the payment for the care you just described also cover some other child?**

| | YOUNGEST | SECOND YOUNGEST | THIRD YOUNGEST |
|---|---|---|---|
| | B146 | B148 | B150 |
| 1 | ☐ Payment for youngest child separately | ☐ Payment for second youngest child separately | ☐ Payment for third youngest child separately |
| 2 | ☐ Includes another child | ☐ Includes another child | ☐ Includes another child |

*ASK OR VERIFY –*

**3e. In a typical week, how much did . . . (or . . .'s family) usually pay in this arrangement for** *(Name of child)*? *(If payment includes money paid for another child, write in total amount for all children in first mentioned child's column. If dollar amount already recorded from previous child(ren) mark codes X2 or X3 as applicable.)*

| | YOUNGEST | SECOND YOUNGEST | THIRD YOUNGEST |
|---|---|---|---|
| | B152 $ . ■■ Per week | B154 $ . ■■ Per week | B156 $ . ■■ Per week |
| X1 | ☐ DK | ☐ DK | ☐ DK |
| | | Previously recorded for – | Previously recorded for – |
| X2 | | ☐ Youngest child | ☐ Youngest child |
| X3 | | | ☐ Second youngest |

## Section 5 — TOPICAL MODULES (Continued)

### Part B — CHILD CARE (Continued)

| | YOUNGEST | SECOND YOUNGEST | THIRD YOUNGEST |
|---|---|---|---|
| **3f.** About how many hours per week was *(Name of child)* usually cared for in the arrangement while . . . worked (was in school/was looking for a job) last month? | 8158 ☐☐ Hours | 8160 ☐☐ Hours | 8162 ☐☐ Hours |
| **g.** Was any other arrangement usually used for *(Name of child)* in a typical week last month? | 8164 1 ☐ Yes<br>2 ☐ No — *SKIP to next child or Check Item T11* | 8166 1 ☐ Yes<br>2 ☐ No — *SKIP to next child or Check Item T11* | 8168 1 ☐ Yes<br>2 ☐ No — *SKIP to Check Item T11* |
| **4a.** What did *(Name of child)* do or how was *(Name of child)* cared for during most of the other hours that . . . worked (was in school/ was looking for a job)?<br>***Mark the arrangement in which the child spent the second most hours in a typical week.***<br>*Mark (X) only one box.* | 8170<br>1 ☐ Child's other parent/stepparent<br>2 ☐ Child's brother/sister<br>3 ☐ Child's grandparent<br>4 ☐ Other relative of child<br>5 ☐ Nonrelative of child<br>6 ☐ Child in day/ group care center<br>7 ☐ Child in nursery/ preschool<br>8 ☐ Child in organized school-based activity (before/after school)<br>9 ☐ Child in kindergarten, elementary or secondary school<br>10 ☐ Child cares for self<br>11 ☐ . . . works at home<br>12 ☐ . . . cares for child at work (in class/while job hunting)<br>*SKIP to Check Item T9* | 8172<br>1 ☐ Child's other parent/stepparent<br>2 ☐ Child's brother/sister<br>3 ☐ Child's grandparent<br>4 ☐ Other relative of child<br>5 ☐ Nonrelative of child<br>6 ☐ Child in day/ group care center<br>7 ☐ Child in nursery/ preschool<br>8 ☐ Child in organized school-based activity (before/after school)<br>9 ☐ Child in kindergarten, elementary or secondary school<br>10 ☐ Child cares for self<br>11 ☐ . . . works at home<br>12 ☐ . . . cares for child at work (in class/while job hunting)<br>*SKIP to Check Item T9* | 8174<br>1 ☐ Child's other parent/stepparent<br>2 ☐ Child's brother/sister<br>3 ☐ Child's grandparent<br>4 ☐ Other relative of child<br>5 ☐ Nonrelative of child<br>6 ☐ Child in day/ group care center<br>7 ☐ Child in nursery/ preschool<br>8 ☐ Child in organized school-based activity (before/after school)<br>9 ☐ Child in kindergarten, elementary or secondary school<br>10 ☐ Child cares for self<br>11 ☐ . . . works at home<br>12 ☐ . . . cares for child at work (in class/while job hunting)<br>*SKIP to Check Item T9* |
| **b.** Was *(Name of child)* usually cared for at his/her home, at someone else's home, or at some other place? | 8178 1 ☐ Child's home<br>2 ☐ Other private home<br>3 ☐ Other place | 8178 1 ☐ Child's home<br>2 ☐ Other private home<br>3 ☐ Other place | 8180 1 ☐ Child's home<br>2 ☐ Other private home<br>3 ☐ Other place |
| CHECK ITEM T10 Is box 3–8 marked in item 4a? | 8182 1 ☐ Yes<br>2 ☐ No — *SKIP to 4f* | 8184 1 ☐ Yes<br>2 ☐ No — *SKIP to 4f* | 8186 1 ☐ Yes<br>2 ☐ No — *SKIP to 4f* |
| **4c.** Was any money payment usually made for this arrangement? | 8188 1 ☐ Yes<br>2 ☐ No — *SKIP to 4f* | 8190 1 ☐ Yes — *SKIP to 4d*<br>2 ☐ No — *SKIP to 4f* | 8192 1 ☐ Yes — *SKIP to 4d*<br>2 ☐ No — *SKIP to 4f* |
| CHECK ITEM T11 Are there 2 or more children listed in Check Item T6? | 8194 1 ☐ Yes<br>2 ☐ No — *SKIP to 4e* | | |
| *ASK OR VERIFY* —<br>**4d.** Does . . . (or . . .'s family) pay for *(Name of child)*'s child care separately, or does the payment for the care you just described also cover some other child? | 8196 1 ☐ Payment for youngest child separately<br>2 ☐ Includes another child | 8198 1 ☐ Payment for second youngest child separately<br>2 ☐ Includes another child | 8200 1 ☐ Payment for third youngest child separately<br>2 ☐ Includes another child |
| *ASK OR VERIFY* —<br>**e.** In a typical week, how much did . . . (or . . .'s family) usually pay in this arrangement for *(Name of child)*? *(If payment includes money paid for another child, write in total amount for all children in first mentioned child's column. If dollar amount already recorded from previous child(ren) mark codes X2 or X3 as applicable.)* | 8202 $ ☐☐.☐☐ Per week<br>X1 ☐ DK | 8204 $ ☐☐.☐☐ Per week<br>X1 ☐ DK<br>Previously recorded for —<br>X2 ☐ Youngest child | 8206 $ ☐☐.☐☐ Per week<br>X1 ☐ DK<br>Previously recorded for —<br>X2 ☐ Youngest child<br>X3 ☐ Second youngest |
| **f.** About how many hours per week was *(Name of child)* usually cared for in the arrangement while . . . worked (was in school/was looking for a job)? | 8208 ☐☐ Hours<br>*SKIP to next child or Check Item T11* | 8210 ☐☐ Hours<br>*SKIP to next child or Check Item T11* | 8212 ☐☐ Hours<br>*SKIP to Check Item T11* |

## Section 5 — TOPICAL MODULES (Continued)

### Part B — CHILD CARE (Continued)

CHECK ITEM T11

*Refer to cc items 27 and 24.*
Is . . . the designated parent or guardian of 4 or more children under 15 years old who live in this household?

8214 1 ☐ Yes
2 ☐ No — *SKIP to 5b*

**5a. Considering all of . . .'s children under 15 in the household, even those not previously mentioned, how much did . . . (or . . .'s family) pay for child care for all of . . .'s children for all arrangements used, in a typical week?**

*(Exclude cost of school tuition for kindergarten, elementary or secondary school.)*

8216 $ _____ . 00 per week

**b. During** *(last month)*, **did . . . (or . . .'s spouse) lose any time from work (school/job hunting) because the person who usually took care of the child(ren) was not available?**

8218 1 ☐ Yes, respondent lost time
2 ☐ Yes, spouse lost time
3 ☐ Both respondent and spouse lost time
4 ☐ No
X1 ☐ Don't know

**c. During the past 4 months, did . . . change any child care arrangements for any children under age 15?**

*(Include ONLY changes in child care providers or location of child care.)*

8220 1 ☐ Yes
2 ☐ No — *SKIP to Check Item T12, page 60*

**d. For what reason(s) did this/those child care arrangement(s) change?**

*Mark (X) all that apply.*

8222 1 ☐ Beginning/ending/changes in child's school enrollment
8224 2 ☐ Beginning/ending/changes in . . .'s job
8226 3 ☐ Beginning/ending/changes in . . .'s school enrollment
8228 4 ☐ Cost
8230 5 ☐ Availability or hours of care provider
8232 6 ☐ Reliability of care provider
8234 7 ☐ Quality of care provided
8236 8 ☐ Location or accessability to care provider
8238 9 ☐ Found better/less expensive/more convenient provider
8240 10 ☐ Never had any regular arrangement
8242 11 ☐ Other — *Specify*

_____

***Go to part C, page 60***

NOTES

# Appendix F. Facsimile of SIPP Work Schedule Module

## Section 5 — TOPICAL MODULES

### Part A — WORK SCHEDULE

CHECK ITEM T1 — Is "Worked" (code 170) marked on the ISS? 9000 1 ☐ Yes — *Read statement A* 2 ☐ No — *SKIP to Check Item T2, page 56*

STATEMENT A — **You said . . . worked during** *(Read reference period months)*. **These next few questions ask about . . .'s work schedule during a typical week that . . . worked during that 4 month period.**

**1a. How many employers did . . . work for during a typical week?** *(Count self-employed as one employer.)* 9002 1 ☐ 1 2 ☐ 2 3 ☐ 3 +

*If two or more employers, ask items 1b—h for the first job, then repeat for the second job.*

| | JOB 1 | JOB 2 |
|---|---|---|
| **b. How many hours per day did . . . work that week?** | 9004 ☐☐.☐ Hours | 9006 ☐☐.☐ Hours |
| **c. How many days did . . . work during that week?** | 9008 ☐ Days | 9010 ☐ Days |
| **d. Which days of the week were these?** *Mark (X) all that apply.* | 9012 xs ☐ All days<br>9016 1 ☐ Sunday<br>9020 2 ☐ Monday<br>9024 3 ☐ Tuesday<br>9028 4 ☐ Wednesday<br>9032 5 ☐ Thursday<br>9036 6 ☐ Friday<br>9040 7 ☐ Saturday<br>9044 8 ☐ Monday—Friday | 9014 xs ☐ All days<br>9018 1 ☐ Sunday<br>9022 2 ☐ Monday<br>9026 3 ☐ Tuesday<br>9030 4 ☐ Wednesday<br>9034 5 ☐ Thursday<br>9038 6 ☐ Friday<br>9042 7 ☐ Saturday<br>9046 8 ☐ Monday—Friday |
| **e. During that week, at what time of day did . . . begin work most days?** | 9048 ☐☐:☐☐ (Time) 9050 1 ☐ a.m. 2 ☐ p.m. | 9052 ☐☐:☐☐ (Time) 9054 1 ☐ a.m. 2 ☐ p.m. |
| **f. At what time of day did . . . end work most days?** | 9056 ☐☐:☐☐ (Time) 9058 1 ☐ a.m. 2 ☐ p.m. | 9060 ☐☐:☐☐ (Time) 9062 1 ☐ a.m. 2 ☐ p.m. |

NOTES



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## Section 5 — TOPICAL MODULES (Continued)

### Part A — WORK SCHEDULE (Continued)

| | JOB 1 | JOB 2 |
|---|---|---|
| **1g.** **Which of the following best describes . . .'s work schedule at this job?** *Read categories.* | 1 ☐ Regular daytime schedule<br>2 ☐ Regular evening shift<br>3 ☐ Regular night shift<br>4 ☐ Rotating shift (one that changes regularly from days to evenings or nights)<br>5 ☐ Split shift (one consisting of two distinct periods each day)<br>6 ☐ Irregular schedule (one that changes from day to day)<br>7 ☐ Other — *Specify* _____ | 1 ☐ Regular daytime schedule<br>2 ☐ Regular evening shift<br>3 ☐ Regular night shift<br>4 ☐ Rotating shift (one that changes regularly from days to evenings or nights)<br>5 ☐ Split shift (one consisting of two distinct periods each day)<br>6 ☐ Irregular schedule (one that changes from day to day)<br>7 ☐ Other — *Specify* _____ |
| **h.** **What is the MAIN reason . . . works** *(Read shift description marked in item 1g)?* | Voluntary reasons<br>1 ☐ Better child care arrangements<br>2 ☐ Better pay<br>3 ☐ Better arrangements for care of other family members<br>4 ☐ Allows time for school<br>5 ☐ Other voluntary reasons<br>Involuntary reasons<br>6 ☐ Could not get any other job<br>7 ☐ Requirements of the job<br>8 ☐ Other involuntary reasons | Voluntary reasons<br>1 ☐ Better child care arrangements<br>2 ☐ Better pay<br>3 ☐ Better arrangements for care of other family members<br>4 ☐ Allows time for school<br>5 ☐ Other voluntary reasons<br>Involuntary reasons<br>6 ☐ Could not get any other job<br>7 ☐ Requirements of the job<br>8 ☐ Other involuntary reasons |

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NOTES

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